

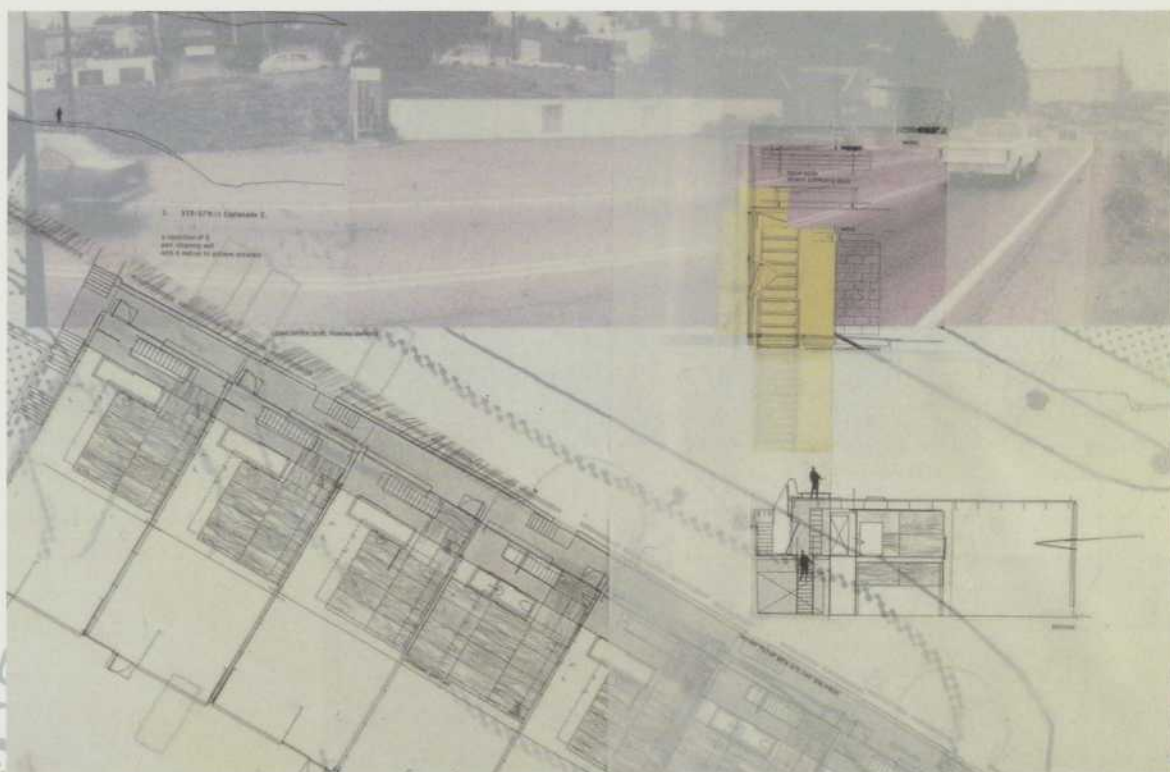
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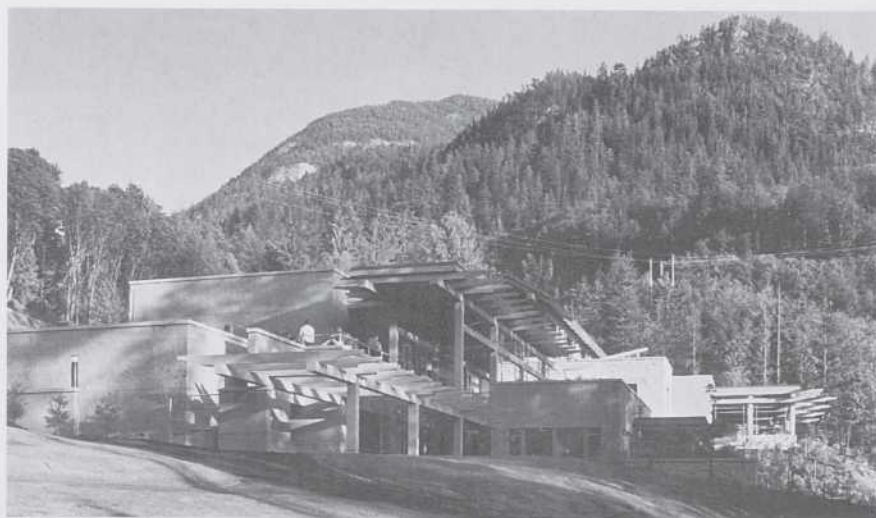
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Parc faunique de Fishtrap Creek
Brad Cameron Design, Vancouver

Conseil canadien du bois Le Programme de Prix des Bâtiments en Bois 1996

Un jury, formé de trois architectes, a choisi, parmi 109 inscriptions, 15 projets qui ont démontré une utilisation ingénieuse du bois tout en répondant aux besoins des clients. Ce programme biennal tenu par le Conseil, veut souligner l'excellence dans la conception de bâtiments en bois.

Le Conseil félicite les 15 architectes ayant reçu les mérites du jury et remercie tous les participants ainsi que les membres du jury : Roger D'Astous, Herbert Enns et Paul Merrick.

Sommaire des prix

Le Prix Ron Thom

Pavillon de golf de Furry Creek
Furry Creek C.-B.
Hemingway Nelson Architects Ltd.,
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PRACTICE AND THE PROFESSIONAL SCHOOL : AN EVOLVING RELATIONSHIP

JULIA BOURKE, PRACTICING ARCHITECT, ADJUNCT PROFESSOR OF DESIGN, MCGILL SCHOOL OF ARCHITECTURE

1996 marque le centième anniversaire de l'École d'Architecture de McGill, première école d'architecture de niveau universitaire au Québec; elle fut fondée six ans après la création de l'association des Architectes de la province de Québec. Créées à l'origine afin de servir la profession, des écoles telles que celle de McGill se trouvent à un tournant significatif, la discipline ainsi que la profession ayant depuis considérablement changé.

Au travers d'une série de vignettes écrites par son corps enseignant actuel, c'est le profil d'une institution remarquablement stable que présente ce numéro de ARQ; celui-ci nous offre la perspective d'une ère où la profession devint son propre maître, où les écoles se multiplièrent de manière générale et où les études d'architecture furent reconnues en tant que discipline académique distincte. Le centenaire de l'École coïncide aussi avec une fin de siècle marquée par d'énormes bouleversements touchant non seulement au sens et à la forme de l'environnement construit mais aussi au mandat de l'architecte; ceci représente donc un moment approprié pour réévaluer l'interdépendance de la théorie et de la pratique ainsi que la clarification de nos désirs et de nos responsabilités en tant qu'architectes.

1996 marks the hundredth anniversary of the McGill School of Architecture. McGill's was the first university level architecture school in Quebec, founded six years after the creation of the Province of Quebec Association of Architects, whose constitution required compulsory architectural examination of candidates seeking membership. It was recognized at this time that "study in the scientific and art subjects (was) essential to fully equip an architect for fulfilling the duties of his profession".¹ The institutionalization of architectural education and the professionalization of the discipline were clearly indelibly linked, and although in many ways the two systems have grown apart since, they maintain to this day a complex if uncomfortable inter-dependency.

There is abundant evidence of the rift. In North America in particular, practice allows little room for indulgence in thought, driven as it is by the bottom line, and dependent on an uncomprehending public and a crude building industry with little interest in funding research and development. Architecture as a field of inquiry has expanded well beyond the constraints of market demands, while at the same time continuing to uphold a practical application under the cloak of professional training. Academia is left wearing two caps, and increasingly distinguishes in its programs and hiring policies between makers and thinkers. Though students continue to enroll in the hope of practicing, they have a highly uncertain future in a profession which for all its efforts has not managed to maintain either a necessary role in the marketplace or a highly significant role in the cultural community. Yet architecture continues to have a mysterious allure, drawing the best and the brightest away from more sensible pursuits.

If the profession is in crisis, lacking authority in the public eye, and spread too thin to present a coherent picture to its own members let alone its skeptical audience, the field itself has never been richer in terms of the diversity of issues embraced. We are perhaps the last of the

Howard Davies ('82), practicing architect, Adjunct Professor of Design

Teaching is great: I learn something every day. A problem... is on your mind—the studio becomes the research lab. There is something tremendously exciting about 30-40 people getting together to work out a problem. The studio becomes a barometer of just how active your architectural sensibilities and interests are. You have to be on your toes, know a bit about what is going on, and keep things fresh. I really don't like repeating things because of the risk of becoming typecast, something which happens all too easily in the outside world. Here, perhaps more than anywhere else, thoughtful, challenging investigation is the bottom line.

Amal Andraos ('96)

Face à un marché où les possibilités d'exercer la profession d'architecte et de survivre en s'employant se font de plus en plus rares, il est important pour une École d'Architecture tel que McGill, dont la fierté est d'enseigner l'architecture en tant que profession avant tout, de remettre sans cesse en cause toute idée préconçue sur les connaissances et les outils indispensables à un diplômé aujourd'hui. Au-delà de la maîtrise technique, l'université est un lieu privilégié d'explorer toutes les possibilités, même parallèles, qu'offre une formation aussi riche que celle d'architecte.

generalists in an era of specialization. Our work combines intuition and intellectual rigour, poetry and pragmatism; it requires a knowledge or talent in the realm of the material, technological, environmental, aesthetic, social, economic, philosophical... the list is absurdly long, perhaps endless. The growing complexity of each area of study precludes the possibility that the architect today remain an expert: "Jack of all trades, expert of none," as they say. This puts in question both the traditional role of the professional and that of the schools, but it by no means undermines the discipline itself. Our strength as well as our impotence comes from our passion for generalization. It is perhaps in the very marginalization of architecture that we are discovering the necessary space to reflect and build. Though we weep that our enthusiasm is not easily shared, our aspiration in the current cultural context to the creation of a physical order much larger than ourselves, is clearly ambitious, if not naive. The physical web of inter-connectedness is ironically much more elusive than the virtual one.

Above and beyond external obstacles, there remains the fundamental challenge of attempting to bridge analytic and synthetic modes of thought. As popular mentor, Dutch Architect Rem Koolhaas, ironically explains: "architecture is difficult and debilitating... our whole office of 35 people was intellectually engaged for over two years to make this simple idea (that it would be nice to have an apartment that floats in the air) a reality. In those two years there was no possibility to also think."²

Conor Sampson ('96): The trick is to grasp the shape of the problem, to know where it begins and ends, to contain intuition within the framework of intent and method, but always to preserve the mystery by leaving some element deliberately unresolved. Unlike many of the skills one somehow assumes an architecture graduate should be aware of, this skill is not restricted in its application to the field of architecture.

Jeff Hannigan, practicing architect, Adjunct Professor of Design

I don't think there has ever been a bigger gap, and so little mutual respect, between the schools and the typical architectural office. While some students still aspire to buildability, we are seeing the proliferation of the "school" project, from which the fall-back position is no longer a basic competency or professionalism. The model of the professor has also changed: previously teaching led from a career in practice; now many who teach and theorize have never practiced at all.

Julie Dionne, 3rd year student
L'école nous apporte un avantage: la possibilité de faire des erreurs (sans graves répercussions).

Kent Fitzsimons ('96)

The dominant ideology in professional practice upholds the popular dichotomy between so-called practical concerns (the essential backbone) and academic aspects of architecture. But this backbone is not fixed; the relative importance of, say, aesthetic, economic and social concerns has changed greatly through the history of architecture. Architects simply adhere to different formulae or rhetorical devices to support what they perceive to be a necessary endeavour. What is of utmost importance in professional practice is the recognition of the ways in which sets of rhetoric interact and compete. Architecture school offers the opportunity to study and distinguish between these different ideologies.

The McGill School of Architecture, founded to serve the profession, has valiantly attempted to maintain its original mandate, yet the discipline has evolved considerably, and schools like McGill, no less than the profession itself, are at a significant turning point.

This issue of ARQ offers a profile of the life of a school (its first hundred years) through a series of vignettes by its current faculty. This brief glimpse at one remarkably stable institution affords us some perspective on an era in which the profession came into its own, schools in general proliferated, and the study of architecture was recognized as a distinct academic discipline. The hundredth anniversary of this school also coincides with the end of a century marked by tremendous upheavals regarding not only the form and meaning of the built environment, but the mandate of the architect as well. It presents an appropriate moment for a re-evaluation of our desires, obsessions, and responsibilities.

1. A. C. Hutchison, founding member and president of the PQAA, 1891, as quoted in Norbert Schoenauer, *Stewart Henbest Capper* (McGill School of Architecture, 1996), p.5.
2. Rem Koolhaas: *Conversations with Students*, ed. Sanford Kwinter (Rice University School of Architecture and Princeton Architectural Press, 1996) p.12.

David Theodore ('96)

Five years of architecture school haven't weakened the Mary Poppins-allure of architectural practice. You will recall the crucial scene in the nursery after Mary has blown away her rivals and awarded herself the governor's commission. As a way of introducing herself to, and of taking control of her diminutive clients, she pulls out a measuring tape to see how they all measure up—an initial site survey, so to speak. Her young charges are expecting a number, a quantitative measurement, and are agreeably surprised to have such technical information interpreted for them... Mary's self-measurement: not 5'6", or 165 cm, but Practically Perfect in Every Way. In no time at all Mary establishes both diagnosis and cure—just a spoonful of sugar... How to gain this poise, this perfect posture of the expert? Surely it's a matter of breeding, not training? Mary is so untainted and undaunted by the giant social forces that condition the lives of her clients. Could I ever learn to walk briskly (no slouching!) through that Mary Poppins world where there are no problems but practical problems, where all problems of practice can be magically overcome through the efficacy of drawing, propriety and manners? The answer is simple: yes, if I practice. Practice, practice, practice. The film makes clear that Mary is eminently qualified as a result of the assiduous application of the rule "practice makes perfect". Practice makes practically, and not just theoretically, perfect. I just found out however, that I have been doing the wrong kind of practicing all these years—practicing architecture as if it were a trombone or a racket. Apparently I have not yet begun to practice. I wish we could dismiss this wrong practice simply by saying that school is "theory" and employment "practice". But whatever the (regrettable?) divide in contemporary architecture between theory and praxis, it has not separated neatly into the pair: school/work. Or if it has, it is only to show that schoolwork is somehow an inferior kind of practice. Oh I suppose I could have been taught more practical skills—I mean both more of them and better ones. But would that more practical practice really have taught me how to really practice, to practice so perfectly, flying in when the wind blows from the east, and quietly leaving when the job is practically perfectly done?



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MONTREAL ARTS+CRAFTS DWELLINGS

NORBERT SCHOENAUER, MACDONALD EMERITUS PROFESSOR OF ARCHITECTURE

De même que ses successeurs Nobbs et Traquair, le premier directeur de l'École d'Architecture de McGill, Capper fut un architecte «Arts and Crafts» engagé. Motivés par leurs mentors, de nombreux diplômés de McGill concurent de très belles maisons «Arts and Crafts» dans la région de Montréal.

INTRODUCTION

The Arts and Crafts movement originated in Great Britain and its prophets were John Ruskin (1819-1900), William Morris (1834-1896), and Philip Webb (1831-1915), as well as members of the Pre-Raphaelite Brotherhood of British artists, all of whom attempted to revive traditional artistic and moral values that appeared to be on the decline in the wake of the Industrial Revolution. In 1884, a group of young architects who apprenticed with Richard Norman Shaw (1831-1912), formed the Art Workers' Guild. Instead of following classical and medieval architectural styles, they began to seek design inspiration from indigenous rural buildings in Britain. Attracted to this new Free Style architecture, other British architects gradually joined the Guild and by the turn of the century their commitment to the Arts and Crafts movement brought about the golden age of the "Domestic Revival." This new design approach influenced residential work in Europe, but its impact was most significant in North America, where the availability of inexpensive land encouraged country living, and where the exodus of city dwellers to a new urban environment, "the suburbs," gained ever greater momentum. In Canada, as in the United States, the Arts and Crafts movement began to influence domestic architecture in several large cities, from the 1890s onwards. The movement was introduced to Montreal by architects and teachers who had received their training in the United States and Europe where they were invariably exposed to the newest trends in design based on vernacular revivalism.

ARTS AND CRAFTS EDUCATION IN QUEBEC

In 1896, scholar and noted Scottish Arts and Crafts architect Stewart Henbest Capper (1859-1925), was invited to establish a new School of Architecture at McGill University. Capper gave up his architectural practice - including assisting Sir Patrick Geddes in his efforts to revitalize Castle Hill in Old Edinburgh - and moved to Montreal. Although his tenure at McGill lasted only seven years, Capper's contribution to the organization of architectural education during the crucial initial years was nevertheless important.

The School's two succeeding directors also came from Scotland: Percy Erskine Nobbs (1875-1964) and Ramsay Traquair (1874-1952). Nobbs and Traquair continued the teaching of Arts and Crafts begun by Capper. Prior to coming to Montreal, both had worked for Sir Robert Stodart Lorimer (1864-1929) in Edinburgh, a member of the Art Workers' Guild and a romantic traditionalist whose domestic design was much admired for its attempt to develop a Scottish vernacular version of the English Arts and Crafts cottages.

Like his Professor Gerald Baldwin Brown (1849-1932) of the University of Edinburgh, Nobbs believed that a close

connection must be maintained between art and its social and physical setting. Throughout his tenure at McGill, he encouraged his students to understand and appreciate Quebec's unique rural buildings and urban grey stone houses since they truly complemented existing local "social" and "climatic" conditions. Nobbs had serious reservations about designs imported from abroad, and advocated the continuation of a national building tradition as a basis for local architecture.

Traquair was, like Capper, a scholarly person, his teaching of architecture based on traditional values and sound building practices in the manner that he had been taught in Britain. Like Sir Robert Rowand Anderson (1834-1921), who established the National Arts Survey of Scotland to encourage the study of vernacular buildings, Traquair pioneered the survey of Quebec's indigenous architecture, a copious record of buildings later published in his book *The Old Architecture of Quebec* (1947). For his pioneer work, the University of Montreal awarded him an honorary degree.

Nobbs' and Traquair's fascination with Quebec's traditional rural buildings was shared by William Edward Carless (1883-1949), a British colleague who joined the faculty as Assistant Professor from 1920-29. Another distinguished McGill professor of this period was British-born Philip John Turner (1876-1943). His enthusiasm and love of traditional English architecture, coupled with his expertise in building construction, complemented the teaching of his colleagues.

COUNTRY HOUSES

The great influx of British immigrants to Canada throughout the 19th century kept alive cultural ties with the "Old Country" and many prosperous people with roots in the United Kingdom favored homes displaying a British country house style. Half-timbered buildings with roughcast walls and exaggerated roof lines reminded their occupants of the old English farmhouses and homes of their ancestors. Since many Montreal families came from Scotland, it is not surprising that at the turn of the century a Scottish influence in domestic design is also evident in the largest city of Quebec.

As in Britain, the first manifestation of an Arts and Crafts influenced domestic design in Quebec is found in country houses of the well-to-do. Several distinguished Montreal architects, such as Robert Findlay (1859-1951), Edward (1867-1923) and William Sutherland Maxwell (1874-1952), Charles Jewett Saxe (1870-1943), John Smith Archibald (1872-1934) and Percy Erskine Nobbs (1875-1964), built mansions in the suburbs and exurbs of Montreal.

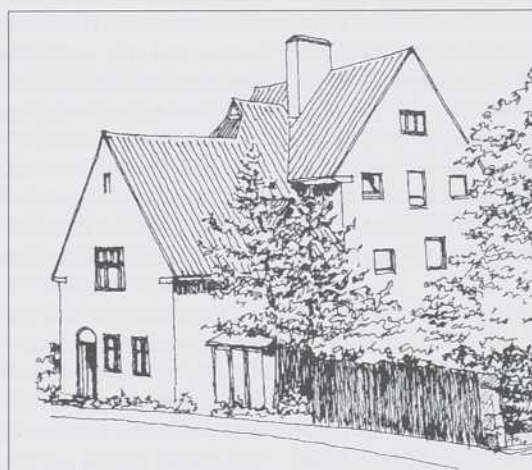
An early example of a large country house inspired by British prototypes is the multi-gabled and half-timbered Harry Abbott House (1892), in the village of Senneville. Designed by R. Findlay, this building had a stone base, with dressed stone lintels and window quoins, while the exterior of the upper stories was roughcast between vertical timber frames. Edward Maxwell modified the building in 1908.



1



2



3



4

1. Harry Abbott House (1892), Robert Findlay.
2. "Boisbriant" gate Lodge (c. 1898), Edward Maxwell.
3. 38 Belvedere Road, Westmount (1913-15), P.E. Nobbs and G.T. Hyde.
4. Two small houses from a cluster of five, Westmount (1921-25), P.E. Nobbs and G.T. Hyde.

McGILL
School of
Architecture
100
YEARS

CHRONOLOGY OF THE SCHOOL

Editor's note: largely drawn from Norbert Schoenauer's "McGill's School of Architecture: A Retrospection", *Prospectus*, Ellen Liebovitch ed. (McGill Schools of Architecture and Urban Planning, 1987). Special thanks to Professor Schoenauer whose generosity and wealth of knowledge make him such a model educator.

Prior to the introduction of formal architectural education in the United States and Canada, the conventional method of training was the office apprenticeship system. In Montreal this was supplemented by evening courses in technical and art schools. Periodic lectures were also given in McGill's affiliated religious colleges on the history and design of church architecture. Alternatively, students attended the École Nationale des Beaux Arts in Paris.

McGILL UNIVERSITY DEPARTMENT OF ARCHITECTURE ESTABLISHED IN 1896 in the Faculty of Applied Science with an endowment by William C. Macdonald. First university level school in Quebec, founded one year after Harvard's, the tenth in the U.S.

FIRST DIRECTOR 1896-1903: Stewart Henbest Capper, M.A. [art history] 1880 University of Edinburgh, École des Beaux Arts, Paris, 1884-7, RIBA (1900). Practices in Edinburgh prior to McGill appointment.

Program: four years. Capper responsible for all architectural lectures and studio courses. One other full-time teacher until 1900. Preparatory year in engineering: Mathematics, Science, Descriptive Geometry and Drawing, practical introduction to tools and materials (wood turning, bench work, foundry practice). Second year: History of Architecture, Elements of Architecture, Building Construction and Design complement science curriculum. Third year: History of Art, History of Architecture, Design, Drawing and Modelling, Theory of Structures, Hygiene. Fourth year: Design, Drawing and Modelling, Domestic, Public and Ecclesiastical Architecture, Specifications and Hygiene.

Pedagogy: combines Arts and Crafts and Beaux Arts traditions, with an equal emphasis on art and science courses. Liberal arts

Also in Senneville, at 202 Senneville Road, Edward Maxwell, in 1897, modified and enlarged an existing country house dating from the mid 18th century for Charles Meredith and his wife, Elspeth Hudson Angus. In 1909, Robert and Frank R. Findlay added extensions to this building's two extremities. With its stone masonry walls, three cross-gables, several bay windows, pronounced eaves, and steep roof, this mansion, too, echoed the design influence of the vernacular revival movement.

A talented architect equally adept in classical and Free Style design, Edward Maxwell was also responsible for the restoration in 1898 of the John C. Abbott Senneville country house "Boisbriant," at 170 Senneville Road. With several ancillary buildings, this large estate was conceived in the spirit of the Arts and Crafts movement, with stone gables, deep eaves, steep roofs, and a pillared *porte cochère*. The gate lodge of the estate, a half-timbered building with white roughcast panels between dark timber frames, was unquestionably in the English vernacular tradition.

In partnership with one of McGill's first graduates in Architecture, George Taylor Hyde (1879-1944), Nobbs designed, in Senneville, the John Lancelot Todd country house (1911-13), at 180 Senneville Road. Built entirely of stone, this two-story stately mansion with an impressive *porte cochère*, pillared sleeping porch and large veranda, has a steep hipped roof, the angle of the slope repeated on its polygonal dormer windows. With the exception of the dining room, all principal rooms of this residence afforded a view over the Lake of Two Mountains.

As late as 1926, Harold E. Shorey (1886-1971) and S. Douglas Ritchie (1887-1959) built the Donald Forbes Angus House at 200 Senneville Road, Senneville. With its two cross gables, a steep roof and two massive chimneys, this large residence is a charming example of Arts and Crafts inspired country houses.

PRE-WORLD WAR I URBAN AND SUBURBAN HOMES

One of Westmount's earliest half-timbered suburban homes was built in 1889 by Edward Maxwell for his father, at 188 Cote-Saint-Antoine Road. Seven years later, in 1896, Robert Findlay designed another half-timbered villa at 12 Aberdeen Avenue, Westmount. Both were inspired not only by the Arts and Crafts movement but also by the American "Queen Anne" villa style in vogue at the time.

Dating from 1902, and designed by Charles J. Saxe and John Smith Archibald, an exceptionally beautiful early example of a half-timbered suburban home was built for Minnie Louise Davis, at 466 Côte-Saint-Antoine Road, Westmount. With its closely spaced vertical timber frames and prominent brick end-gables dominated by massive clustered chimneys, this house recalls the romantic image of traditional indigenous dwellings of Britain.

In Montreal as well as in its suburbs, Percy Nobbs built several homes which unmistakably reflect Lorimer's simple and plain approach to domestic architecture. In all his domestic work Nobbs stressed the importance of good sun exposure and adequate ventilation in all rooms of a dwelling. He also believed that all facades of a home should be

given equal design consideration in order to ensure that views of the rear of buildings were as pleasing as those of the front. These design tenets are evident in his own house (1913-15) at 38 Belvedere Road, Westmount. Constructed on the upper slopes of the mountain, this four-story brick building is not only pleasing from all angles, but also offers its occupants a breathtaking vista of the city below.

Nobbs' and Hyde's Arts and Crafts design principles are also manifestly evident in an enclave of five homes (1921-25) at 3166-3182 The Boulevard, Westmount; four of these attractive houses are semi-detached dwellings and the fifth, detached. Another group of pleasant homes designed by Nobbs and Hyde is the Grove Park Estate (1924-29), Westmount. These clustered houses echoed Nobbs' conviction that, apart from facilitating aesthetic harmony between buildings of a residential enclave, groups of dwellings built concurrently have an added economic benefit. He rightly argued that there is a substantial saving in building forty houses together, as against forty houses, built one by one.

DOMESTIC DESIGN OF THE INTERWAR PERIOD

Montreal shared in Canada's general prosperity following the First World War and since vernacular revivalism was still popular with Canadian architects, many single family homes, and even entire residential neighbourhoods, were designed and built in the spirit of the Arts and Crafts movement. Several architects engaged in these domestic designs were graduates of McGill's School of Architecture, such as Harold E. Shorey ('07), Harold Lea Fetherstonhaugh ('09), Henri Sicotte Labelle ('17), Harold Butler Little ('20), Alexander Tilloch Galt Durnford ('22), Morley C. Luke ('23), A. Leslie Perry ('23), Henry Ross Wiggs ('23), and P. Roy Wilson ('24), to name but a few.

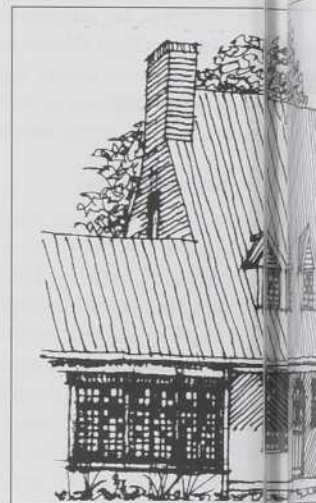
The practice of Arts and Crafts architecture, however, was not limited to McGill-trained professionals. Aristide Beaugrand-Champagne (1876-1950), a Quebec architect, for example, designed Free Style suburban homes. His own stuccoed house, built in 1922 at 345 avenue Bloomfield, Outremont, had an L-shaped plan and a steep white gabled front elevation with an arcaded entrance porch. He also designed the William E. Williams House (1929), a massive stone gabled house with small paned windows facing the street, at 645 chemin de la Côte-Sainte-Catherine, Outremont; it, too, had an arcaded porch entrance. A similar Outremont stone building was built by Henri S. Labelle on Côte-Sainte-Catherine Road.

In 1926, Leslie Perry (1896-1982) and Morley Luke (1900-1967) designed 72 Belmont Crescent, Westmount, for F.W. Sharp. This two-story stone building, with steep slated roofs, clustered chimneys, a half-timbered cross-gable and a diamond-paned oriel window above an enticing entrance door, is a model of vernacular revivalism. In 1930, Perry and Luke submitted an entry to the Competition for an Ideal Ontario Home, sponsored by the T. Eaton Co. Ltd., and their classic Arts and Crafts design won a Third Prize.

About the same time, John Smith Archibald built a large stone mansion for Noah A. Timmins, at Belvedere Place in



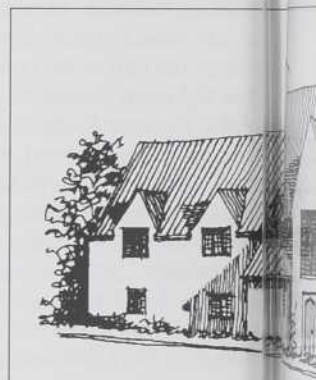
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5. 345 Bloomfield Avenue, Outremont (1922), A. Beaugrand-Champagne.
6. 72 Belmont Crescent, Westmount (1926), Leslie Perry and Morley Luke.
7. Priests' Farm House, Montreal (1920), Shorey and Ritchie.



Westmount, with a beautiful wood-panelled living room and decorated plaster ceiling. Unfortunately this living room has only survived in part. Because the building was deemed too large for the real estate market in 1962, a 17 foot wide central section including part of the living room was demolished to create two "sellable" smaller detached houses in this fashionable suburb.

In the 1930's H.L. Fetherstonhaugh (1887-1971) designed a large residence for T.W. McNulty at 3120 Daulac Road, Montreal. With its plain wall surfaces, steep tiled roof, eaves broken by gabled dormer windows, and a catslide roof sweeping down adjacent to the protruding cross-gabled entrance, this multi-gabled stone-built home is a classic example of Arts and Crafts elegance. As in homes designed by the eminent English architect Charles F.A. Voysey (1857-1941), the stateliness of this building does not derive from ornament, but from well-proportioned building mass, texture, muted colours and subtle details, such as a Voyseyesque upward flair at the ridge near its extremities.

H. Ross Wiggs (1895-1986), another committed Arts and Crafts architect, designed the Mountain Lodge at the foot of Mont Tremblant, Quebec. In addition to the lodge, this popular resort village in the Laurentians consisted of an inn, a recreation center and numerous cottages scattered about in the woods and along the ski trails.

While it is true that most Arts and Crafts homes emulated British prototypes, Quebec's traditional "gable-hearth" farmhouse also inspired several architects. David Jerome Spence designed, in 1921, the William Saint-Pierre Residence, at 21 avenue Peronne, Outremont, a charming one-story stone building with a prominent roof and a row of dormer windows. On Lakeshore Road, in Dorval, Nobbs and Hyde designed residences for Arthur H. Scott (1922) and Minnie Louise Davis, both buildings unquestionably paying homage to Quebec's indigenous architecture. Several McGill graduates also designed residences in the Quebec style. Shorey and Ritchie's two-story stone-built A.J. Nesbitt Residence at Forden Crescent, and Perry and Luke's Gerald W. Birks Residence, at 90 Summit Circle, both in Westmount have pronounced gables and massive twin chimneys in the image of a *manoir*. A.T. Galt Durnford (1898-1973), too, built a Quebec vernacular-inspired house for D.A. Wanklyn, at Atwater Avenue, Montreal. Finally, Fetherstonhaugh, Durnford, Perry, Luke and Little built several Quebec farmhouse-type residences in the Laurentians.

One example of an entire neighbourhood of Arts and Crafts inspired townhouses and semi-detached dwellings was built in the 1920s by Shorey and Ritchie on a former Sulpician Order property called Priests' Farm. Most streets of the Priests' Farm housing development were designed as crescents, and in the rear of the properties a wide paved lane gave access to garages. The average building lot had a frontage of about forty-five feet (13.71 m) and a depth of ninety feet (17.43 m). The exterior walls of buildings were of hollow cement blocks with a rustic brick, rubble stone or roughcast facing, and cypress woodwork. With steep dark slated roofs and the frequent use of half-timbering

and roughcast panels, these buildings are very well preserved with the exception of the replacement of several small-paned casement sash windows by modern "picture" windows. The landscape work of the property was carried out by Thurnburg Brothers, Ltd., of course under the supervision of the architects.

A late romantic example of Arts and Crafts design and craftsmanship is the former A.D. McCall residence (1932) at 619 Clarke Avenue, Westmount, designed by P. Roy Wilson. The walls of this building were constructed of stone from six different quarries to harmonize in color with the red-brown variegated English tiled roof. Wilson masterfully changed the building material near the top of the stone-built gable to end in brick chimneys (of the same hue as the roof tiles), giving the building a pleasing "old look" from the start. The exterior woodwork was made of weathered cypress and the windows were leaded glass in steel sash. This home, like most other Arts and Crafts buildings, has improved with age, a characteristic shared by all timeless architecture.

CONCLUSION

After the First World War the popularity of the Arts and Crafts movement declined in Europe and by the 1920s a new "modern" design trend emerged. While the Arts and Crafts architects sought inspiration in local indigenous buildings, and their work thereby inherently acquired a regional identity, the modernists not only disposed of most references to past architecture, but with the adoption of an international outlook, aimed at a universal design approach. In spite of these basic dissimilarities, however, some characteristics of the Arts and Crafts movement, such as functionalism, wholesomeness, and an informal open plan of dwellings, were retained by "modern" designers in domestic architecture.

With the retirement of the "old guard," Nobbs, Traquair and Turner, and the appointment, in 1941, of John Bland to head the School of Architecture, a new era began at McGill in architectural education. Under Professor Bland's leadership, the School prospered as never before, and during his tenure, lasting more than three decades, a new generation of architects received their training in domestic design. Many of them have excelled internationally in housing.

Montreal's Arts and Crafts dwellings are souvenirs from a time when residential architects tried - against many odds - to sustain and preserve old aesthetic values and traditional craftsmanship in an ever expanding industrialized society. Hence these vernacular revival dwellings represent an important chapter in Montreal's rich architectural history and the best of Arts and Crafts homes are worthy of being treated as heritage buildings.

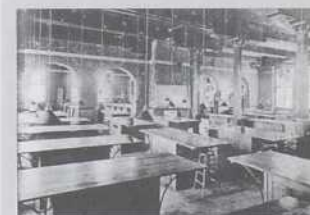
Norbert Schoenauer is the author of *Arts+Crafts and Art Nouveau Dwellings* (1996), available of the School of Architecture, McGill University.

Editor's note: footnotes eliminated due to lack of space. See author for references.

considered the foundation of training in design, "the means to an end which the design expresses and embodies in permanent, vital form." Capper rejects "untrained spontaneity... appeal(ing) successfully neither to reason nor to good taste," a view typical of the Arts and Crafts movement.

Enrolment: three students graduate in 1899/four others registered. Women allowed to participate in architectural and modelling classes only, and with special permission.

Tools/Facilities: school located on top floor of old MacDonald Engineering Building. Capper acquires 2000 photographs and lantern slides, large collection of casts, books and periodicals, building materials.



THE ERA OF NOBBS, TRAUQUAIR AND TURNER: 1903-1939

Complimentary collaboration characterized by **humanism, traditional romanticism and a marked influence by the arts and crafts movement.** Nobbs a talented designer and successful practitioner, Traquair, an accomplished scholar and Turner, a pragmatic architect.

Director 1903-1913: Percy Nobbs M.A. (arts) 1894 University of Edinburgh, RIBA (1900). Professor of design until retirement in 1940. Nobbs maintains an active practice, and espouses "a sober architecture, well-built, functional and respective of its surroundings with the measured use of (relevant) ornamentation. He "shuns both the flamboyancy of eclecticism and the nakedness of modern architecture".

8. 619 Clarke Avenue, Westmount (1932), P. Roy Wilson.
9. 3120 Daulac Road, Montreal (1930), H.L. Fetherstonhaugh.
10. D.A. Wanklyn, Atwater Avenue, Montreal, A.T. Galt Durnford.

GORDON MCKINLEY WEBBER

MEMORIES OF AN ARTIST, DESIGNER AND TEACHER (EXERPTS FROM THE MONOGRAPH)

BRUCE ANDERSON ('64), PROFESSOR, FORMER DIRECTOR ('85-90), MCGILL SCHOOL OF ARCHITECTURE

Extraits d'une monographie sur Gordon Webber (1909-1965), professeur à l'école d'Architecture de McGill qui enseigna le cours "Basic elements of Design" (Les éléments de Base du Design), de 1943 à 1965.

In commemoration of its centennial, the McGill School of Architecture is publishing a series of monographs dealing with such personalities as Stewart Henbest Capper, the first Director, and teachers such as Peter Collins, Stuart Wilson, Alvaro Ortega and Gordon Webber. Copies may be obtained by writing to the School.

Gordon McKinley Webber was born in Sault-Ste-Marie, Ontario, and raised in Toronto, in an area known as "The Beaches," located close to lake Ontario. Born with a spinal defect resulting in a disability known as "Spina Bifida," he was unable to walk in his early years, and grew to only 5'-1". Although he had very little schooling in his early years, having to be examined often at the Hospital for Sick Children, he was treated to music records brought home by his father, an opera buff, and his mother exposed him to fine art. Upon finishing high school in 1924, Gordon Webber was awarded a scholarship to the Ontario College of Art.

In the spring of 1927, during Gordon's third year at the college, its leading creative teacher and then Vice Principal Arthur Lismer resigned. His loss was so greatly felt by the students that in protest, a group of a dozen or so organized their own classes under what they called The Art Students League of Toronto. Gordon remained at the Art Students League from 1927 to 1930.

In 1929, amateur painter and League lecturer Dr. Fred Banting, famous for the discovery of Insulin, took an interest in Gordon's condition, resulting in the amputation of Gordon's lame leg just above the knee. After the surgery, Gordon grew three inches, and with the help of a cane and artificial leg—which he dubbed "Tibia", his mobility improved to such an extent that he became very active, even agile. His physical manner and appearance made a strong impact, as John Bland, Director of the McGill School of Architecture during Webber's tenure, recalled: *Normally Gordon got about quite easily with a crutch, but in familiar surroundings he could move surprisingly swiftly, depending only on his leg and arms. While he accepted his handicap without complaining or even mentioning it in any way, he had an obviously extravagant mannerism of showing off, balancing on one leg and waving his crutch in the air to greet his friends. His great admiration for dancers may have been based upon his appreciation for graceful movement he was unable to achieve. He admired the easy way people were able to swing on or off moving vehicles, but dancing was what he liked to watch the best. He knew many ballet dancers and was frequently their guest backstage.*

Since his handicap did not easily accommodate conventional attire, Webber designed his own distinctive custom-made clothing—one-piece suits which were more like comfortable coveralls and often made of heavy ribbed corduroy. His shirts were often collarless and sometimes embroidered at the neck. He hated neckties but often wore a short neck scarf held with a woggle. His shirt sleeves were

long, sometimes ruffled, extending out beyond his wrists.

With a desire to prepare himself to further the development of art education in Canada, Gordon enrolled in 1937 in the New Bauhaus at the Chicago School of Art under the direction of Lazlo Moholy-Nagy.

The original Staatliches Bauhaus was founded in 1902 in Weimar, Germany, when Henry Van de Velde from Holland received the commission to design the Arts and Crafts School, followed by The School of Fine Arts in 1910. During 1926-28, the Bauhaus School, which was looked upon unfavorably by the Weimar bourgeoisie, was removed from Weimar to Dessau and was housed in a new building designed by Walter Gropius who had been appointed Professor and Director in 1919. In 1920, Gropius left Dessau to engage in private practice in Berlin and in 1934 took refuge in England. In 1937 he emigrated to the United States where he was appointed Professor of Architecture and later Chairman in the Graduate School of Design, Harvard University.

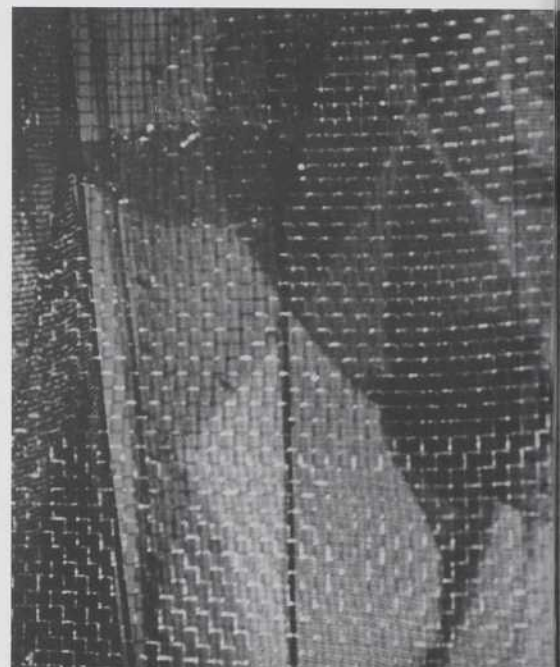
In due course the influence of the Bauhaus was established in the United States. Two American schools of design adopted a modified Bauhaus curriculum. The Institute of Design (New Bauhaus of Chicago), was headed by Moholy-Nagy. Joseph Albers taught first at Black Mountain College, North Carolina and later at Yale. Former students headed schools and taught in New York and California. Mies Van der Rohe organized and headed the School of Design at the Illinois Institute of Technology.

The School of Design in Chicago was based on the tenets of the Dessau Bauhaus, with courses organized around classroom theory and workshop practice. Following a two-semester preliminary course, students could continue with an additional three year program to obtain a diploma in design, and could choose to study for two more years to obtain a degree in architecture. In the spring of 1942, Webber graduated with a Bachelor of Design degree (Light and Painting Workshop).

Gordon Webber came to McGill on February 1st, 1943, having been brought to the attention of John Bland by Arthur Lismer. As Bland explains: *Webber taught courses or workshops in The Basic Elements of Design in the second, third, fourth and fifth years. After his experience in Chicago, he sought only structural pattern, colour, texture and essence of design in things that caught his eye. Lismer saw his talent for the design analysis of things as almost the reverse of design in architecture and imagined he would be a stimulating influence in the McGill School. At first he was incomprehensible, not a persuasive lecturer and often vague and inconclusive. Students had their own idea of what design was, and found his first assignments painfully disciplined. For example they would be asked to make careful drawings of numerous rectangles on a sheet of paper and then to progressively place a single dot in an interesting and unique way in a number of them; then progress to two dots, or a single line, a dot and a line, and so on. In time, it became clear that even in arranging two bricks together, or choosing the place for an opening in a wall, there were design opportunities. Also he was a super demonstrator, at his best in helping students to discover things by themselves either in drawing, making compositions in col-*



Gordon Webber
Photographic portrait

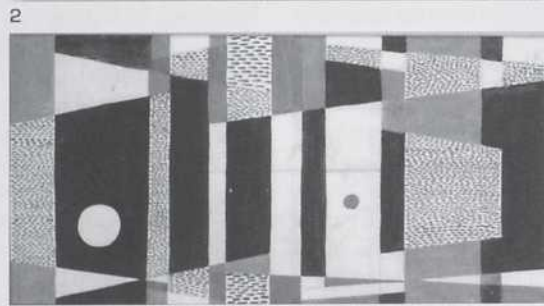
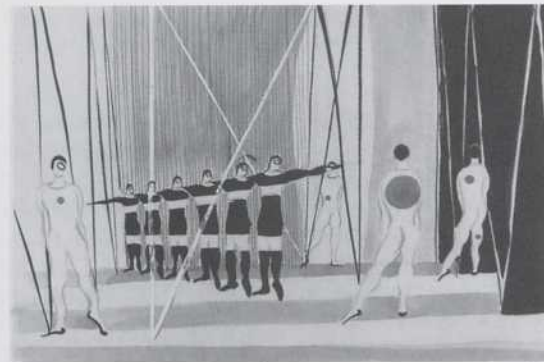


our or constructing things to be explored with light and photo sensitive paper. All his exercises required a high degree of mechanical skill which everyone enjoyed displaying. They were intended to explore pattern, material, structure, texture, colour, high light, shadow and reflections. Their application to architectural design, stage sets, posters and so on, were left to others.

Webber taught Architectural Drawing part-time until 1953, when he was appointed Assistant Professor. He also taught in the Art Association School at the Montreal Museum of Fine Arts, along with Audrey Taylor, under its director, Arthur Lismer. Professor Emeritus Stuart Wilson ('44) recalled: *(Gordon Webber's) many courses had led to a clarification of aims as to the meaning of Modern, and even to a tentative exploration of what might be beyond. Many former students, such as Arthur Erickson, were inspired by his teachings. One hot summer Webber offered an evening course in Basic Visual Design at the Montreal Museum School of Art. We met for a two-hour session per week. Gordon would give a lofty discourse outlining a proposed exercise. We learned how to turn off and to direct our thoughts towards simple but subtle arrangements... Everything had to be clear, short, active but balanced. Producing the finished work took another 30 to 40 hours per week of work at home.*

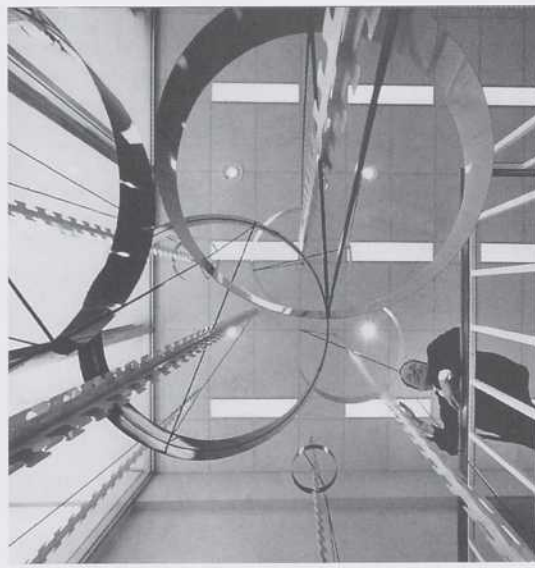
His influence on McGill students was profound, not in terms of any structured academic theory, since he was not strong with words, but because he was an artist with an astonishing sensitivity for form, pattern, colour, texture, space and mood. "Webber" or "Gordie" knew when things were working visually—were well composed, balanced, dramatic and exciting. For almost 25 years, this eccentric and colourful personality motivated students to explore the rudiments of composition, form, colour and sound. Projects were unlike anything done in other courses.

Students learned the applications of media—pencil, ink and gouache, by placing simple forms in a sequence of picture frames. Textural effects and transparencies were



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1. Gordon Webber - inscription reads: "me with an 8' screen structure designed and built for the architects' ball in Chicago last winter". 2 screen flats with coloured cellophane images of god and goodness of light. It turns on a table and has a spot projecting the coloured images on a large white wall behind. This was my first work with moving colour with light. The colour is absolutely pure."
2. Ballet, "Color Movement in Space" or "Trio for 17", one of 10 color plates designed by Gordon Webber in the early 1950's.
3. Gordon Webber - mural studies in coloured gouache, Bruce Anderson collection.
4. Mobile.



4

investigated in a two-dimensional application of ink and colour with sponges, dry brush and pen. Three-dimensional studies were made by arranging suspended elements in cubic frames made of wire or wood. Textural "feelies" which were meant to be felt but not seen, were not taken too seriously by students, but they had a considerable pedagogical value, and became a highlight of amusement when Gordon reviewed the work. Colour was handled through making a colour wheel and chromatic or value matrix. Application of these principles was generally limited either to small scale exercises which taught the making of colour harmonies, colour balance and so on, or to small design projects such as the design of a small space for the display of sculpture or a stage set.

According to retired Professor, former Director of Urban Planning, David Farley ('59): *Spring, School of Architecture 1950's, we folded paper like we never thought we could. I was amazed at what I produced. We knew we were in the presence of someone deeply serious about the work. His reaction to each effort was enthusiastic and creative. He demanded the very best of each of us. For him the worst faults were callousness or carelessness.*

Photography was introduced into basic design following the early work of Moholy-Nagy in this field. "Photograms" or light drawings of patterns on photosensitized paper made without the use of a camera were the main expression of this medium although studio photographs of folded paper forms were later made using large view cameras.

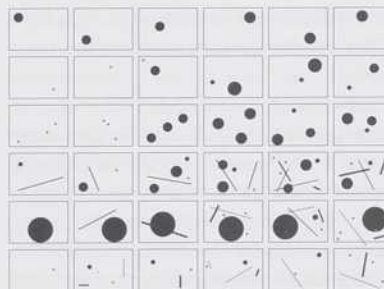
During the 1950's and early 1960's, short films were made in the design workshop. Webber himself had made several short film animations, using the early method of Norman McLaren, by laboriously drawing or scratching the abstract sequences of line and texture on 35 mm film stock. With the School's 16 mm Bolex camera, a few students were always encouraged to capture the expressive qualities of their "Webberisms," whether they were experimental sound machines, arrangements of coloured

objects in space, or objects in motion made spectacular with light effects. Unfortunately, these few films were never fully edited or produced with a complete sound track, as they were viewed as exercises set up with sound from a tape machine.

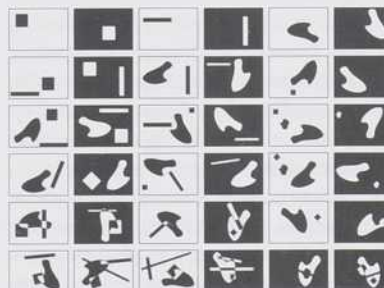
Dance was also explored, with the introduction to the third year Basic Elements of Design course of a ballet component in 1963-64, which Webber called Motion in Space. Webber himself designed two beautifully crafted ballets.

In addition to teaching, painting and photography, Webber, a member of the Association of Canadian Industrial Designers, was commissioned to design integrated art for buildings (decorative and sculptural elements, space frames, mobiles, murals and relief panels), and also assisted with colour schemes for buildings by such architects as Watson Balharrie, John Parkin, Louis J. Lapierre, Rother Bland and Trudeau, and Ray Affleck. He took part in many University activities and was also an ardent traveller, spending summer breaks in Europe, North America and Russia. He was devoted to a large group of friends including former students with whom he corresponded frequently through the mail.

Gordon Webber died of a heart attack on November 17, 1965, at the age of 56, having spent twenty-two years teaching at McGill. Only a few days before his death he had made four speeches during a Saturday campaign to save from demolition a precious heritage house in Perth, Ontario, where students had just returned from the annual Sketching School. Characteristically, he had willed his eyes to the eye bank, and his body to McGill's Department of Anatomy. His ashes were scattered in the hollow on the Campus of the University, where he had devoted most of his life. At the memorial service held at Redpath Hall, Gilles Gagnon expressed what all of us who knew him felt: "Friends all over the world will remember him for his great courage, generosity, dynamism and humanism. Gordon saw beauty everywhere and his love of form and movement coupled with an acute sense for colour, texture and



Exercises in The Basic Elements of Design course - Stuart Wilson, student, 1940's.



proportion made us continually "re-think" our aesthetic evaluations."

Gordon left his possessions to the University to be disposed of for the benefit of needy students in the School of Architecture. In 1967, an endowment for the Gordon Webber Bursary and Loan Fund for needy students in the School of Architecture at McGill was established.

Webber was a member of the Association des Artistes Non-Figuratifs de Montréal, the President and member of the Montreal Section of the Canadian Group of Painters. His paintings are in the National Gallery of Canada, the Robert McLaughlin Art Center in Oshawa, the Art Gallery of Toronto, the Vancouver Art Gallery, the Art Gallery of Greater Victoria, the Brandon Allied Arts Center and the McGill University Art Collection.

McGILL
School of
Architecture
100
YEARS

Director 1913-1939: Ramsey Traquair. Educated at the Universities of Edinburgh and Bonn and the Royal College of Art, apprenticed in Capper's office, RIBA (1900). Appointed head of Architecture at the Royal College of Art. Private practice 1905-1912. Traquair continues a pragmatic philosophy of architectural education, with an emphasis on traditional values.

Philip Turner studies at the AA in London, RIBA (1901), PQAA, RAIC (senior fellow). Begins private practice after emigrating to Montreal in 1906. Begins lecturing on building construction in 1910, and subsequently, Professional Practice and Specifications. President of the PQAA, 1933. Appointed professor same year.

Program: Nobbs establishes two streams: B.Sc. Arch. and B. Arch with less stringent entrance requirements in sciences, less courses in common with engineers. Extended to five years in 1915 by Traquair with preparatory year "designed to impart such general cultural, scientific knowledge and skill of hand as will prepare the student to profit by the work of the succeeding years". Course work of next four years grouped under seven headings, namely Design, Aesthetics, History, Science, Construction, Professional Practice, and Drawing, and complemented by architectural engineering courses. Compulsory summer sketching/measuring school introduced by Traquair in 1921.

Enrolment: Two graduates 1906, eight in 1912. Peaks at ten graduates/year in the 30's. Enrolment decreases drastically in the wake of the depression and the outbreak of WWII.

Tools/Facilities: School relocated to ground floor of engineering building, rebuilt to Nobbs design after 1907 fire. Blackader Library of Architecture founded 1917 by parents of Gordon Home Blackader ('06) killed in WWI. Collections today unmatched by any other university architectural library in Canada. Extensive collection of measured drawings of traditional Quebec architecture produced in Traquair's course Historical Drawing.

GIRL ARCHITECTS-TO-BE

EARLY WOMEN GRADUATES OF MCGILL'S SCHOOL OF ARCHITECTURE, 1939-1970

ANNMARIE ADAMS, ASSOCIATE PROFESSOR, MCGILL SCHOOL OF ARCHITECTURE

Tiré de l'étude sur les architectes canadiennes que mène, de façon continue, le Centre de Recherche et d'Enseignement sur les Femmes de l'Université McGill, ce mémoire traite de l'éducation et des carrières qu'entreprirent les premières diplômées de l'École d'Architecture de l'Université McGill, de 1939 à 1970.

Among the thousands to receive degrees from McGill University this June in formal graduation ceremonies at Place des Arts was architect Catherine Mary Chard Wisnicki. The Honourary Doctorate of Science is her third degree from McGill. A pioneer of BC Modernism and the first woman to graduate in Architecture from McGill, Chard Wisnicki's contributions to the profession have long been neglected. Chard Wisnicki's momentous convocation in 1943 was not the beginning of the debate over the admission of women students to Architecture at McGill.² The controversy had inspired a flurry of internal correspondence as early as 1918, when Juliana Dallaire of Moose Creek, Ontario, sent the following request to the university: *Kindly send me the calendar of the University and please tell me if it is possible to study landscape gardening, perspective, inside decoration and work in white and ink in the University. Also [if] it is necessary to pass examinations. Yours truly- Juliana Dallaire*³

An optimistic university registrar, J.A. Nicholson, replied "So far women have not been admitted to the course in Architecture, but it is just possible under the changed conditions consequent upon the war that an exception might now be made."⁴ Five years before Dallaire's letter, a request from the Montreal Women's Club had demanded the admission of women students to a number of faculties at McGill, making "special reference to the suitability of women for Architectural work."⁵ Subsequently, the following resolution was passed: The Faculty of Applied Science beg[s] to report (to Corporation) that in view of the very insufficient accommodation of our present classes they cannot recommend admission to the faculty at the present time.⁶ The Club appealed again to the university in 1929, at which time the Faculty of Applied Science justified their rejection of women students once more on the grounds that the Department of Architecture was already overcrowded and that the building was "designed for male students exclusively," without "cloak room, common room or rest room."⁷ Director Ramsay Traquair fiercely opposed to the admission of women, added to these reasons: "Much architectural draughting is done at night, the main drawing-room being open until ten o'clock. The responsibility for the maintenance of discipline in the evening is assumed by the students themselves. If women students were admitted, it would be necessary to provide staff supervision during these evening drawing periods, and such supervision would require additional members of the staff and put the School to extra expense for which it has no funds."⁸

It was, however, the "changed conditions" brought about by World War II, rather than World War I as Dr. Nicholson had presumed (and an anonymous letter to the Montreal Star), which finally convinced McGill's administration to admit women students to Architecture.⁹ Chard Wisnicki was accepted to the program in 1939, having ap-

plied for four consecutive years. Six months later a second woman, Arlene Scott, was also admitted.

McGill's School of Architecture counts many illustrious architects among its 39 women students who graduated between 1943 and 1970. Although relatively few stayed to practice in Quebec, these first McGill alumni made a considerable impact on the profession here, constituting ten of the eighteen women registered as members of the OAQ prior to 1970.¹⁰

Three major themes have emerged from our interviews with early graduates and from the relatively scanty documentary evidence of their time spent as students at McGill. The first is that an extraordinary number of the women who attended the School prior to 1970 were outstanding students. They received top marks, won awards, were published in national journals (fig. 1); and in some instances, such as Chard Wisnicki, wrote or co-authored thematic essays published in the professional press.¹¹ Sheila Baillie Hatch (B.Arch. '46), for example, won prizes for architectural drawing (1942), for the highest standing in second year (1943), for architectural engineering (1944), and was later awarded one of three medals by the RAIC. Hanka Rosten Renehan graduated at the top of her class in 1948, winning the Lieutenant-Governor's Silver Medal, the Lewis Robertson Prize in design, and the McLennan Travelling scholarship. Chard Wisnicki, Blanche Lemco van Ginkel (B.Arch. '45), Rosten Renehan, Ala Mendelsohn Damaz (B.Arch. '46), Barbara Milne Lambert (B.Arch. '47), and Sarina Altman Katz (B.Arch. '60) saw their student projects published in national journals.

Secondly, despite the fact that McGill was the last Canadian school to accept women to its program in Architecture, its graduates occupy a number of "firsts" (or nearly so) for women in architecture. For example, Lemco van Ginkel was the first woman appointed to a teaching position at the University of Pennsylvania in 1951 (together with Siasa Nowicki), the first woman to be elected as an officer of the OAQ in 1971 and the RAIC in 1972, the first woman to become a fellow of the RAIC in 1973 (fig. 2), and the first woman appointed as a Dean of Architecture and Landscape Architecture at the University of Toronto in 1980. Chard Wisnicki was the second woman to register with the Architectural Institute of British Columbia in 1946 and the fourth to become a member of the Ontario Association of Architects the previous year.

Finally, while other studies have presumed that the absence of men in Montreal during World War II provided the ultimate opportunity for women to enter the profession in Quebec, our research points to the important role played by immigrant women, particularly from eastern Europe, in Montreal following the war. Of the eighteen women registered with the OAQ prior to 1970, twelve were born outside Canada with seven from eastern Europe. Our working hypothesis, at this point, is that the cultural backgrounds of the numerous women born in countries where women architects were already a sizable percentage of the profession by the postwar period gave them the confidence, skill, and experience to make it in the male-dominated Montreal architectural scene. "Eastern

Europe (and I am told Hungary in particular) recognized women in the professions much earlier than North America. This led to a natural acceptance of these fields within the family," commented Anne-Marie Balazs Pollowy (B.Arch. '60).¹²

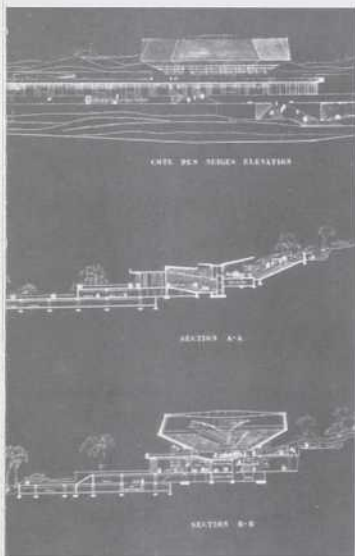
We believe that the case for women architects in the development of Modernism in Quebec was very much contingent on this postwar influx. Among the early McGill students who may fall into this category are Christina Poznanska Perks (B.Arch. '57) of Poland, Tiuu Tammist O'Brien (B.Arch. '58) of Estonia, and Sarina Altman Katz (B.Arch. '60) of Roumania. They are all extremely successful practitioners, whose subsequent careers were built on their early experiences of Modernism.

Chard Wisnicki's honorary degree this year is intended to celebrate the Centennial of the School of Architecture in 1996. Certainly the next century will mean an ever-increasing role for women at McGill and in the profession of Architecture. Chard Wisnicki encourages today's young women to enter the field. "I anticipate a great future for women in architecture, particularly in view of all the current upheavals in society," states Chard Wisnicki optimistically. "It is my contention that women are awfully good at dealing with upheavals."

Annamarie Adams is co-author (with Professor Peta Tancred, Sociology) of the forthcoming book, *Re-designing the Workplace: Canadian Women Architects, 1920-92*.

NOTES

1. This research is part of an interdisciplinary project at the McGill Centre for Research and Teaching on Women, funded by the Social Sciences and Humanities Research Council of Canada. I am especially grateful to the other team members, Sarah Baker, Jill Trower, and Peta Tancred, and to Margaret Gillett, who generously shared her research notes on the history of women at McGill. The OAQ staff was also very helpful in providing information on its early members. The term "girl architects to be" is taken from a *Gazette* interview (Oct. 13, 1956) with two McGill students.
2. The stormy debate over the admission of women is analysed in Margaret Gillett, *We Walked Very Warily: A History of Women at McGill* (Montreal: Eden, 1981), 317-22.
3. Undated letter in McGill University Archives (MUA).
4. Letter of 20 July 1918 in MUA.
5. Letter from the Chairman to the Faculty, 29 Aug. 1918, in MUA.
6. *Ibid.*
7. Letter of 5 October 1929 in MUA.
8. "Extracts from Minutes of October 2, 1929 regarding 'Admission of Women to Architecture,'" in MUA.
9. Gillett, p. 319.
10. These ten architects are Janet Shaw Mactavish, Blanche Lemco van Ginkel, Evanthia Zoumboulidou Caragianis, Tiuu Tammist O'Brien, Elizabeth Compton Ross, Christina Poznanska Perks, Doris Droste Steffen, Anne-Marie Balazs Pollowy, Sarina Altman Katz, and Malca Tobman Feldman. Dorice Brown Walford received her Master's from McGill and is not therefore included.
11. See E.G. Faludi and Catherine Chard, "The Prefabricated House Industry," *RAIC Journal* 22, no. 3 (March 1945), 56-62; and Catherine M. Chard, "What is an Architect?" *RAIC Journal* 19, no. 2 (February 1942), 30-33.
12. Personal letter from Balazs Pollowy, 23 August 1994.



1



2

1. Thesis project by Sarina Altman Katz for a "Music centre in Montreal", published in *Architecture-Bâtiment-Construction* [July 1960], p. 37.
2. Christina Poznanska Perks acted as Attaché and Project Deputy Director for the Canadian Embassy in Japan, which was completed in 1991.

SKETCHING SCHOOL

DAVID COVO AND GENTILE TONDINO

ASSOCIATE PROFESSORS, MCGILL UNIVERSITY SCHOOL OF ARCHITECTURE

Les croquis que font les architectes lors de leurs voyages sont une évidence de leur curiosité face au monde et une conséquence des tentatives qu'ils/elles font pour le comprendre en observant et dessinant ce qui se voit et se ressent. Ces croquis sont plus que des images: ils enregistrent information et savoir, révélant ainsi un processus de recherche où les idées architecturales sont explorées et une plus profonde compréhension de l'environnement développée.

Many architects sketch when they travel - in all kinds of media, on fine watercolour paper and in familiar 'blackbooks', on napkins, on the backs of envelopes and even, but rarely, on stretched canvas. Some keep journals that document journeys with ruled margins and crisp pencil drawings and others fill notebooks where train schedules and e-mail addresses share the page with watercolours of the Parthenon. For most, these sketches are more than just images; they record both information and knowledge and reveal a process of inquiry in which architectural ideas are explored and a deeper understanding of the environment developed.

This kind of sketching is for architects a fundamental skill but it is acquired with practice, so at the end of every summer half of the student body of the McGill School of Architecture and three faculty members disappear for a little over one week to Sketching School, a one-credit course that the University Calendar, with characteristic understatement, defines as "an eight-day supervised field trip in the late summer to sketch places or things having specific visual characteristics."

Sketching School is one of a series of courses in freehand drawing that have been a part of the School's curriculum since 1896. Every student graduating in 1996 will have completed four courses in freehand drawing (life drawing) and two Sketching Schools; some may also have taken a fifth course, Freehand Drawing and Sketching, a one-credit 'Sketching School in the city' given by Professor Gentile Tondino on Thursday evenings, and a few others might even have taken an additional course in painting offered by him through the Faculty of Education.

The first Sketching School was held in 1921 under the direction of Professor William Carless, FRIBA, who took a class of about ten students to Quebec City. The second was led by the Director of the School of Architecture, Professor Ramsay Traquair, who travelled with the class to Toronto and Kingston, where the days were filled with watercolour sketching and careful measured drawing - both were essential elements of the course at that time - and where, according to *Old McGill* 1924, "the evenings found the majority in the town seeking diversion of one kind or another." Measured drawings are no longer part of the course and attendance has increased dramatically - from ten in 1921 to almost ninety in Charlottetown in 1995 - and it has been many years since anyone went sketching in jacket and tie, but not much else has changed.

In the next two decades the course was taught by several others, including P. Roy Wilson, ('24), and Frederick Taylor, ('30). Gordon Webber, who had studied with Moholy-Nagy in Chicago, and Arthur Lismer, a founding

member of the Group of Seven, taught the course together from 1942 until Lismer's departure in 1954, along with Stuart Wilson, ('43), who joined them in 1948. When Gordon Webber died in 1965, Tondino, who had been appointed in 1961 to teach the freehand drawing courses, joined Stuart Wilson and the two worked together for the next sixteen years. This combination was both entertaining and stimulating, and the animated evening discussions they led at Sketching School will remain for hundreds of students some of the most unforgettable memories of their time at McGill. Tondino has directed the course since Wilson's retirement in 1981, working with David Covo, and since 1986 with Ricardo Castro

The location of Sketching School moves every year but the criteria used in its selection have not changed significantly since 1921. The site is usually a small to medium-sized town located on the shore of a navigable body of water. It is within a day's travel from Montreal by road or rail. Most importantly, the place selected is architecturally rich and visually memorable. Quebec City and Kingston, sites of the first two Sketching Schools, have remained both appropriate and popular locations. In the last ten years, the course has travelled to sites in five provinces: Port Hope and Gananoque, Ontario; Baie Saint-Paul and La Malbaie, Quebec; Halifax, Nova Scotia; Charlottetown, PEI; and St. John, New Brunswick. In 1991, it was held for the first time in the USA, in Gloucester, Massachusetts, and in 1993, in Bar Harbor, Maine. This summer the group will return to Gloucester and Cape Ann.

At Sketching School students are generally expected to explore the place and to make sketches that describe what they find; evaluation is based on a portfolio of at least twenty pieces, the majority of which must be substantially worked, addressing the subject matter of townscape and landscape. The emphasis is on field sketching with people working individually or in small groups. On rainy days, those determined to remain outside find shelter under an assortment of overhangs, gazebos, and balconies, while

those retreating indoors find inspiration in markets, taverns, churches, boat sheds and other previously undiscovered interiors. First-time students spend the first three or four mornings under the supervision of the instructors in a series of open air workshops developing basic skills in drawing and watercolour. Everyone is expected to work in a variety of media, but not to the extent that they become distracted from the subject.

Every second evening, the entire group gathers for about two hours to review the work and engage in informal discussions on the intentions of the course and the process by which images and memories of the place are formed. The tendency to isolate objects in the composition without considering the whole space, and difficulties in reconciling the edge of the paper with the absence of boundaries in the subject, are some of the issues revealed not so much as problems with drawing as with seeing; it is through drawing, however, that the problems are identified and new ways of seeing explored.

By the end of the course, the place is thoroughly and eloquently documented in the more than two thousand images generated by the group over the eight day period - three hundred of these will be selected and matted for exhibition in December. Energy levels are high and opportunities to exercise new skills in the design studio are anticipated by students as they make their preparations for the return to Montreal. The sheer volume of production is exciting, but must be seen as the result of a process intended to develop in architecture students not only a love of drawing but also an appreciation for its power as a mechanism for understanding the world.

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Hunter River, PEI; watercolour, Marc-André Plasse, 1995

MCGILL
School of
Architecture
100
YEARS



Other faculty: Montreal Architect Ernest Cormier assists in design 1919/20. French-born artist Edmond Dyonnet, RCA teaches modelling and freehand drawing, followed by British-trained William Carless (assistant professor, 1920-29), then Frank B. Chambers (1929-42) author of *The History of Taste*, teaching aesthetic and drawing courses.

TRANSITION 1939-41

In 1938, due to lack of enrolment, Principal Lewis Douglas (1938-39) considers phasing out architecture at McGill. Young Montreal architects send memorandum to the Principal and Dean of Applied Science urging the School's continuation and proposing improvements including establishing an Advisory Committee of leading architects and designers, and the admission of women to the School. Criticisms include the "out-datedness of some courses, the doubtful value of the School's museum of antiques, the absence of courses in Regional Planning, Town Planning, and Housing, and lack of encouragement in self-expression and original thought."

With Traquair's retirement in 1939, Turner becomes Acting Director (1939-41). Because of failing health Turner entrusts the running of the School to Executive Secretary John Bland ('33) in 1940. With the support of Montreal architects, and McGill's new principal F. Cyril James, the continuation of the School is ensured. The enrollment of women is finally permitted, and an advisory committee established.

Turner and Bland reorganize architectural design program in 1940. First year: scale- and freehand drawing (pencil, charcoal and watercolour), simple methods of building construction. Second year: planning of simple living and working places. Structural design introduced. Third year: site analysis (Environment, Mass and Surface), quarter scale working drawings, full size details. Fourth year: project for a large building with complicated circulation and complex structural system, detailed studies of building materials and construction methods. Fifth year: group planning in the first term, then individual thesis projects.

THE COMMUNITY DESIGN WORKSHOP AT MCGILL UNIVERSITY

JOSEPH BAKER, PROFESSEUR TITULAIRE, FACULTÉ D'ARCHITECTURE, UNIVERSITÉ LAVAL
PIETER SIJPKES, ASSOCIATE PROFESSOR, MCGILL SCHOOL OF ARCHITECTURE

En 1969, à l'École d'Architecture, Joseph Baker fonde l'Atelier de Design pour la Communauté qui, comme le définit un article paru dans la revue *Canadian Architect* en 1973, permet «d'étendre les perspectives de l'étudiant et de procurer de modestes services de nature architecturale aux institutions communautaires auxquelles l'argent nécessaire à l'emploi de services professionnels normaux manquait». Le CDW (Community Design Workshop n'était bien évidemment pas unique: le désir qu'avaient étudiants et corps enseignant de rendre service à la communauté en dehors de l'enclave universitaire se faisait ressentir dans tout le monde occidental. Ce désir ne se limitait pas aux écoles d'architecture: pour chaque clinique ou atelier d'architecture, il y en avait un médical ou légal. C'était un exemple classique d'un «zeitgeist» en action. En tant qu'étudiant membre actif du CDW au début des années soixante-dix et ayant hérité de Joe, à son départ pour Laval en 1975, du «fichier communautaire», je lui ai demandé de faire un compte rendu sur l'impact de l'Atelier de Design pour la Communauté. Le fruit de cette demande est une lettre de Joe, reproduite ici et envoyée par fax de Londres où, au moment de sa rédaction, il passait une partie de son année sabbatique. J'ai annoté la lettre afin d'expliquer certains des faits et acronymes qui sont plus inconnus. C'est par une discussion sur un projet de studio récent, suivi à McGill par mes étudiants de seconde année et qui démontre la persistance de l'influence de l'Atelier de Design sur la communauté enseignante actuelle, que cet article se termine.

The Community Design Workshop (CDW) in the School of Architecture was founded by Joseph Baker in 1969 to "provide modest architectural services for community institutions that lacked money for normal professional services, and to broaden the student's outlook (...)", as stated in a 1973 article in *Canadian Architect*.¹ The CDW was, of course, not unique: the desire to be of service to the community was felt all over the western world, and not only in architecture schools—for every architecture clinic or workshop there was a medical or legal one. It was a classical example of a *zeitgeist* at work.

As an active student member of McGill's CDW in the early seventies and the inheritor of the "community file" from Joe when he left for Laval in 1975, I asked him to collaborate with me on writing a review of the CDW'S impact. The result of this request is the following letter from Joe, faxed from London, where at the time of writing he was spending part of his sabbatical year. I have annotated the letter to explain some of the less known facts and acronyms. A discussion of a recent second year studio project, showing the continuing influence of the Community Design Workshop, concludes this article.

Pieter Sijpkes

London, May 10 1996

Dear Pieter,

Had time to re-read the *Canadian Architect* piece that I wrote so long ago and I think the origins of the CDW, its efforts, its pedagogical and social value are documented as fully and truthfully as they can be.¹ I have been giving some thought to the place of the CDW in the larger context of Montreal and Quebec City where through my transfer in '75 its influence continued to make itself felt.

Thinking about the areas that the CDW intervened, Lower Westmount, the Pointe, Griffintown, Milton Park, the Plateau, the record is very uneven. A walk through what was Griffintown reveals that the City had its way; industrial zoning closed the last semblance of community; it's a wasteland of turning-spaces for container transporters. You know more about the Pointe than any of us; the Metro and the rediscovered appeal of in-town living made it an attractive hunting ground for housing bargains. An influx of yuppies must surely have changed the unemployment profile as well as the condition and price of property—but what about the kids who gathered on your adventure playgrounds³, still hauling bricks somewhere? *Loge-Peuple*⁴ did sire a host of better run co-ops but perhaps its biggest success was the incentive it created for some of the local kids to successfully continue with their education. Lower Westmount resisted the Hydro substation, the TransCanada Highway ramp and Rubin development's proposals, but the result was gentrification; housing prices increased as much as tenfold. Your mushroom at Devonshire School wilted⁵ and the School soon followed. At least it was replaced by co-op housing. Too bad its parking lot is bigger than its play park. In Milton Park the balance is even better; it was the CDW that first mooted the outlandish proposal to buy back the vacant Concordia properties which eventually came to pass thanks to the clout of Phyllis Lam-

bert. It was a CDW project, SAVE THE MAIN (staffed with my CMHC Scholarship group) that gave its name to SAVE MONTREAL. We were founder members of that organization which surely had an impact until its energies were drained by the establishment (and I use the word advisedly) by Heritage Montreal. Its efforts didn't halt the demolition of the Laurentian or Queens hotels, the toppling of St. Norbert Street and Overdale nor the emptying of the Forum. BUT during the same period better than two hundred non-profit housing co-ops bloomed in the Montreal region, many thanks to the efforts of you and your friends in the Conseil du Développement du Logement Communautaire⁸, some who had wet their feet in the CDW. We were founding members of the Progressive Urban Movement, which together with the PQ (I remember an early meeting when St. René himself was present) and the Syndicaux gave birth to the RCM, which was not the total disaster that some would paint it.

My departure for Quebec City was a direct result of labours with the CDW. I first went as a visitor to Laval's Clinique d'architecture in St. Roch. When elected Director I had the idea that not just a lone studio within a School but a School itself would push a social ideal. For a while it seemed possible. Out of it came the Bon Pasteur project, an enormous convent acquired to make way for a new Palais de Justice but which we convinced the Government to transform into six housing co-ops, almost two hundred units. A saner plan for the Colline Parlementaire earned plaudits when my student team hauled their huge model into the Red Room of the National Assembly. The eventual result: more housing and the St. Jean Baptiste quarter saved from encroachment and street widenings (two of our students set up shop and helped mobilize the neighbourhood). We made Rehabilitation, Recycling and Conservation talking points in the City. The Clinique d'architecture became an autonomous, self-financing resource group that gave and still gives employment to our graduates.

Not a bad record but as elsewhere, interest waned. Why? Spirit of the times? The self-interested eighties? A revived interest in architectural design as an art form? It was around then that architects started framing their yellow paper and hanging it in art galleries. The Alcan lectures certainly aroused greater enthusiasm and attendance than any conservation rally. Then there was the fact that both in Montreal and Quebec, the initiative passed into the sphere of municipal politics. Change was no longer left to minuscule groupings of architects/urbanists at the barricades. Not that the problems have disappeared or become less pressing; unemployment, under-education, the cycle of poverty, the double bind of single parents, discrimination, homelessness (we won't solve that one with clever modular boxes into which the unfortunates can burrow), garbage-strewn streets, deficient mass transit, motor car madness, street safety... These go beyond architectural solutions but that doesn't mean architects and would-bees shouldn't be keenly aware of their urgency. But I'm not sure they get it.

It would be interesting to know what role the CDW

and the Clinique in Québec played in orienting the professional lives of those who took part. (Maybe we should ask for a grant to track them down). Some we know. Some went from the Pointe to Mozambique and China, some from St Roch to Guinea Bissau, some became expert in Conservation others in Housing rehab; some became partners in prestigious firms and some became professors; some married, raised children and went back to practice. There were the founders of non-profit groups, officials in Canada Mortgage and Housing Corporation, contractors, even developers. Have their lives been more rewarding than those who by-passed the CDW experience, who took prizes in design and worked seriously at their craft? (It was, after all, along that path I had set out before the bulldozer came close to my door). It's anyone's guess. I hope we sowed enough seeds that there will be enough with the conviction and energy to continue and question. Lord knows, besides the social problems indicated above, there are enough of a kind that do require an architectural response that differs from those to be found in the ethereal Eisenman-like worlds of the Glossies. How about Safe buildings? How many tragedies like King's Cross or Dusseldorf airport do we need? Dunblane and Oklahoma, Tokyo killers and IRA bombers are beyond our remit, but towering infernos are distinct possibilities in the IBM and La Gauchetière towers and we should militate against these absurd constructions. (A TV programme here had engineer Le Messurier describing how he discovered that the Citicorp tower might have collapsed due to a mistaken change in structural specs, from welded to bolted joints. The Red Cross was alerted to prepare Hiroshima-like disaster plans while the structure was rebuilt, secretly at night from inside). Sick buildings—do we really know what goes into the materials used in our buildings, anymore than the farmers know what goes into their cattle feed? Hospitals, homes, schools, workplaces, all good places to get ill. Energy efficiency will always attract attention and get funding. What about liveability?

In its day the CDW addressed concerns that were troubling some students. It is to be hoped that as long as the studio system survives and department heads allow their teachers the liberty we have enjoyed Pieter, to pursue their outlandish directions, there will be the possibility for innovative education, for adventurous and fulfilling learning, let's hope for a better world.

All this to say Peter, I don't know how to cram that darned CDW into an ARQtitle. Maybe we could do it as a conversation—"kindergarten chats"-online.

Let's talk about it.

Cheers JOE

THE CONTINUING INFLUENCE OF THE COMMUNITY DESIGN WORKSHOP—A RECENT EXAMPLE

This spring my students in the second year design studio met the Reverend Johnson at the former Pointe St-Charles branch of the Royal Bank (corner of Ste-Madeleine and Wellington), which the bank had donated to Teen Haven, a non-profit teen-shelter, headed by the Reverend. After

FROM THEORY TO REALIZATION: A MCGILL TRADITION

A TRIBUTE TO RAY AFFLECK AND PETER COLLINS

RADOSLAV ZUK, PROFESSOR, MCGILL SCHOOL OF ARCHITECTURE

interviewing Johnson and inspecting, photographing and videotaping the building, the students visited one of the two homes currently operated by Teen Haven, familiarizing themselves with the existing arrangement for ten boys on avenue Lasalle in Verdun. From this information a design project was created: the students collectively prepared measured drawings of the bank building and its site, then developed individual proposals for one of two alternative uses: a home for about two dozen teens, or, a training school for unemployed youths in the Centre-Sud area. It was estimated that both solutions would require an extension doubling the existing usable space, which the site's open space could easily accommodate.

The bank, built in 1901, is a very idiosyncratic structure. Overall it almost forms a cube, which is penetrated by a central dome on four column-supported pendentives. It is entered through an elaborately decorated entrance, which, against most classical rules, breaks through the corner diagonally facing both streets. The dome is surrounded, within the cubical building envelope, by a donut shaped apartment, to house the bank manager. From a small window in the dome he actually could keep an eye on the bank vault in the main space. The bank's buff brick bulk and sand stone trim have been hidden by white paint.

The students' design dilemmas ranged from the theoretical (what vocabulary to use when adding onto a classical heritage building) to the very real question of how to design a bedroom or classroom, to the structural question of how to add onto a 1901 masonry building in 1996. National, provincial and municipal regulations governing zoning, construction and fire as well as laws on what constitutes 'private child care' also came into play.

Solutions varied greatly: from a hyper-individualistic diagonal slash-across-the-site addition to more middle of the road approaches fitting in closely with the street and the existing building. But all projects shared a basis in a real site with a real client with a real problem in a real community. The Reverend Johnson preferred the 'middle of the road' solutions when he visited the final review, appropriately held in the bank's splendid central hall. Looking out through the generously arched windows onto St. Madeleine street where I have lived since 1976, it seemed for a few moments as if nothing had changed since I was student of Joe Baker in the Community Design Workshop.

NOTES

1. CANADIAN ARCHITECT October 1973 "An Experiment in Architecture" by Joseph Baker page 30-41.
2. The Metro stop Charlevoix was opened in 1978.
3. Joe Carter and Pieter Sijpkens ran a Garden and Adventure Playground project in Pointe St Charles in the summer of 1972. (*Green Thumbs and Sore Thumbs*, 1972 in-house publication).
4. 200 unit coop housing project in Pointe St.Charles. CDW involved in unit selection, purchase, renovation and management.
5. As students, Berg Balantzián and Pieter Sijpkens constructed a ferrocement playstructure in the yard of Devonshire School, which was later demolished by the City of Montreal.
6. A non-profit corporation formed in the late seventies to assist housing cooperatives with technical and organisational problems.

À la racine des intérêts professionnels et didactiques très différents du praticien Ray Affleck et de l'historien Peter Collins, se trouvaient des attitudes idéologiques semblables. Leurs paroles et oeuvres, issues de deux milieux distincts de l'architecture et provenant comme c'était le cas, de directions opposées, se virent converger presque miraculeusement à McGill afin de générer durant une trentaine d'années une atmosphère d'exploration libre mais rigoureuse d'idées qui pouvaient être testées dans des projets construisibles et cela à des niveaux complexes différents.

It may seem odd and contradictory that similar ideological attitudes should have been at the root of the very different professional and didactic interests and approaches of two such distinct personalities as Ray Affleck and Peter Collins: a practitioner and an historian, a designer and a scholar, and imaginative explorer and a rational theorist, a believer in invention and a believer in the authority of precedent, respectively. The reason for this strange coincidence must have been the shared conviction that architecture is a physical environment, created by humans, which beyond providing protection and comfort to its users, can be an instrument of positive social interaction, can contain and convey stimulating intellectual concepts, and can have the power to generate sublime spiritual experiences. It must also have been the inevitable realization that theory without the test of the environmental reality remains a hypothesis, an ephemeral, albeit fascinating, speculation, and that designing and building without a theoretical foundation is but a mindless repetition of subconsciously acquired habits and routines. After all, it is through the outstanding examples of autonomously coherent built form, which embody new and profound ideas, symbols and experiences, that the art and science of architecture is ultimately advanced. Already as a young graduate of the McGill School of Architecture and the Federal Institute of Technology in Zurich, Ray Affleck participated in exploratory projects, such as the geodesic dome construction in Ste. Anne de Bellevue inspired by Buckminster Fuller. His graduation (thesis) project was conceived in the spirit of the clearly postulated theoretical tenets of the latest developments of the Modern Movement. In the mid-fifties, after several years of a successful individual practice, primarily in domestic architecture, he founded, together with like-minded colleagues, the architectural partnership known later as ARCOP Associates. One of the most distinguished architectural offices in Canada from its very inception, it maintains its impressive international activities, even after Ray's recent death and the earlier departures of the other founding partners. It was in the ARCOP projects, such as McGill University's Leacock Building, and the internationally renowned Place Bonaventure, that the influential concepts underlying his theory of architecture were explored and then presented in published articles and public lectures.

A highly effective studio professor in the McGill School in the early fifties, Ray Affleck could count some of Canada's finest future designers among his students. The demands of practice soon forced him to withdraw from

regular teaching. However, motivated by an exceptional sense of loyalty to the School, he continued to participate, from the sixties until the last days of his life, as an occasional special studio instructor and, above all, as a frequent guest review critic. His incisive comments, supported by well thought out arguments, provided an invaluable learning experience and a sound theoretical design basis for generations of young architects. His informal manner and attire made him very accessible to colleagues and students, yet did not obscure the solidity and depth of his character and beliefs.

The appearance of Peter Collins, by contrast, suggested a very formal, conservative person. White shirt, black suit and tie made him look rather conspicuous and severe. Who would have guessed that some ten years after his death, these would become the "obligatory" colours of the avant garde architectural attire. Could this have been his influence? Of course, his yellow Thunderbird revealed the other side of his character: the inimitable sense of humour, which let occasionally to an inventive practical joke. Another trait was his commitment to excellence and his readiness to help colleagues and students in its pursuit.

A graduate of the University of Manchester, a disciple of Auguste Perret, endowed with insatiable curiosity, Peter Collins developed a rational, history-based approach to architecture. A special gift for writing resulted in numerous critical articles in the British press, followed by a fellowship year at Yale University, and in the late fifties, an appointment as architectural history professor at McGill. To him, the history of architecture was not a catalogue of visual objects, but the history of the forces and ideas that determined the character and form of the built environment—the history of theory. Through his lectures and assignments, he developed a high standard of scholarship and instilled a sense of adventure in intellectual discovery in his students. His three books—the first on concrete and Perret, then the internationally acclaimed *Changing Ideals in Modern Architecture*, and finally, on architectural judgement—reflect the three main areas of his theoretical concerns: architecture as the poetry and logic of building, the importance of the cultural context and the power of the intellectual concept in design, and the arbitrariness and lack of critical standards in the evaluation of architecture. The words and works of these two outstanding individuals based in two distinct areas of the discipline of architecture and coming, as it were, from opposite directions, converged to generate almost miraculously, for some three decades, an atmosphere of free yet rigorous exploration of theoretical ideas tested in buildable projects at different levels of complexity at the McGill School. Appointed initially by John Bland and supported and encouraged by the succeeding directors, Ray Affleck and Peter Collins played a key role in contributing effectively to the then existing and still continuing McGill tradition of a creative interplay between fantasy and reality, between the freedom of thought and the rigour of thinking, between intellectual speculation and physical action, all in the service of an ideal built environment. Istanbul-Kyiv, May 1996

MCGILL
School of
Architecture
100
YEARS

DIRECTOR 1941-1972: John Bland ('33). Born in Lachine, Quebec, diploma in planning '37 AA, London, RIBA, PQAA, RAIC. Architecture and planning practice, first in London with Harold Spence-Sales, and then in Montreal in the firm Rother, Bland, Trudeau, followed by partnership with Roy LeMoine and other associates. President of the PQAA (OAQ) 1953. Member of the City of Montreal's Jacques Viger Commission, and board of directors of the Canadian Heritage of Quebec. RAIC Gold Medal 1985.

Pedagogy: based on modern movement's teaching of rationalism and functionalism, without resorting to doctrinaire position. Staff given freedom to direct their own courses.

Program: broadened to include housing design and town planning, aided by anticipated post-war construction boom. Bland teaches all architectural history courses. Engineering requirements expanded under the conviction that "engineering and architecture must be brought together to resolve modern building problems." The less technical architecture stream eliminated. Gordon Webber, trained at Chicago's New Bauhaus and hired in 1943, establishes basic design course along Bauhaus model for students in second through fifth years—expanded to Communication, Behavior and Architecture by Bruce Anderson ('64/Professor '65-) upon Webber's death in 1965. Curriculum restructured by 1945: Prerequisite: pre-engineering year in the Faculty of Arts and Science Preparatory year: same courses as engineering students plus Architectural Drawing and Elements of Design Second Year: History of Art, Architectural Drawing and Colour II, History of Ancient and Classical Architecture, Building Construction I, Freehand Drawing. Third year: Design, Theory of Design, Planning, History of Medieval Architecture, Building Construction II, Social Observation for Architects, Freehand Drawing, Sketching School. Fourth year: Design, History of Renaissance Architecture, Freehand Drawing, Plumbing. Fifth year: Design, History of Modern Architecture, Professional Practice, Specifications, Studio Work. Additional requirements: structural engineering, 6 months' working experience with report.

ALVARO ORTEGA

VIKRAM BHATT, ASSOCIATE PROFESSOR, DIRECTOR OF MINIMUM COST HOUSING GROUP



ECOL Operation, an experimental low-cost ecological demonstration house using interlocking sulphur blocks, which was put up on the Macdonald College by a group of Minimum Cost Housing Students under the direction of Alvaro Ortega, 1972.

Fondateur du programme «minimum cost housing» (logements sociaux), Alvaro Ortega fut, à l'image de sa carrière éclectique, un architecte et professeur remarquable; cette dernière comprenait la pratique privée en Colombie, l'enseignement et la recherche dans les Amériques ainsi qu'un travail pour les Nations Unis concernant l'occupation territoriale humaine, ceci l'ayant entraîné autour du monde.

When I joined McGill's Minimum Cost Housing Program in 1973, our main research focus was on sulphur technology. I often heard the name "papa sulphur" mentioned fondly by my teachers and senior class mates. The following summer, I had an opportunity not only to meet but also work with "papa sulphur". It was Alvaro Ortega, a charming Latin-American gentleman, the founder of the Minimum Cost Housing Program. A couple of things come to mind about Ortega whenever I think of that summer: The "Napoleon Prize" and "C-day." Let me explain.

To encourage hands-on explorations with sulphur Ortega was instrumental in setting up the "Napoleon Prize." If a team member came up with an innovative idea, say, to mould or de-mould the sulphur block quickly, that person would be awarded the Prize and a medal would be placed on a signboard in front of the winner's name. Not quite the Nobel Prize, but for us "Minimum Costers" it had the same importance. Everyone strived to win the "Napoleon" prize and Ortega was its biggest contender.

Once a week we had "C-day": regular experiments were set aside, and everyone was allowed to go off in their own corner to tinker with their pet projects. Just like the famous D-day, the energy level among researchers on "C-day" was unusually high. Even the most outlandish ideas were welcome: after all, the "C" stood for crazy. For example, someone had the bright idea to use inexpensive aluminum cake molds to produce sulphur paving tiles. And they worked very well, gave a very good finish to the paving blocks, cooled quickly, and were easy to de-mould.

John Bland in his introduction to *Alvaro Ortega* (Bogota, 1989) notes that "he remains fundamentally inclined to experiment in order to know."¹ This spirit of free thinking and willingness to experiment combined with a fine sense of humour perhaps best describe Ortega.

Born in 1920 in Bogota, Colombia, Ortega started his architectural studies in Paris, then with the outbreak of war in Europe continued at McGill, where "with other refugees from Europe he was effective in helping to transform an old school of architecture, which had become a weak department in an important Engineering Faculty, into a modern school, where the sciences related to structure and technical services of buildings were rigorously pursued and there was freedom in design."² Ortega continued his graduate studies at Harvard University's School of Architecture. The progressive modernist thinking of the School's Bauhaus masters Walter Gropius and Marcel Breuer was to strongly influence and guide him throughout his professional career.

Ortega then returned to his native Colombia to enter private practice. In this phase of his life Ortega did remarkable work with large span concrete shells and pre-cast

concrete elements. He also developed the ingenious use of vacuum devices to cast, lift and place large pre-cast concrete elements for use in low-cost housing and large span structures such as factories. His baseball stadium for Cartagena, as beautiful as any of Nervi's or Candela's works, is one of the finest shell structures anywhere, with its undulating lines, light weight structure, and economical use of materials. Ortega's preoccupation with issues of economy and his control of construction processes gave a special meaning to his architecture, where material and form were carefully combined with simplicity, beauty and directness.

After several years of practice in Colombia Ortega began teaching and working for the United Nations. Always "stressing the importance of materials and methods of construction,"³ he taught at several schools of architecture in the Americas, including Harvard and McGill—where he established the postgraduate Minimum Cost Housing Program in 1971. Working under the auspices of the United Nations in association with the asbestos-cement industry in Guatemala and Mexico Ortega developed the "canaletas" roofing system. Using existing machinery in the field, he re-configured the shape of standard asbestos-cement sheets. Instead of spanning only 2 to 3 meters with intermediate supports required at one-meter intervals, the new roofing tile could span 3 to 7 m without intermediate support. This was a great achievement. This invention implying savings for roofs which in poor countries amounted to about 30 percent of ordinary building costs. In a very short time this roofing system became popular throughout Latin-America, then worldwide. As a part of the centennial celebrations, one of these roof elements as well as Ortega's original drawings for the "canaletas" will be put on permanent display at the School. When in the 1980's the health hazards of asbestos fibre became evident, Ortega hoped to replace it with environmentally friendly "concreto marino" - a concrete-like material derived from seawater using electro deposition. Experiments with this material are continuing in several countries to this day.

Ortega's work at the United Nations and the activities of the Minimum Cost Housing Program dealt with small scale technologies, termed "appropriate or intermediate technologies," a good example of which is our work with sulphur. Proponents of appropriate technology believe that in developing countries, strapped for financial and material resources (or in resource hungry developed nations for that matter), the emphasis should be on simpler technological solutions which rely on local resources, are less capital and energy dependant and more labour intensive.

Over the years the program Ortega helped establish has grown and the intent has evolved into a professional philosophy. This philosophy recognizes that to begin with, the issue of housing is economic. How do we build houses that ordinary people can afford? Or more accurately, what sort of houses do people want, for which they can also pay? The issue of economics immediately raises the problem of priorities—not just how much money people have, but exactly on what they want to spend it. Hence the program deals not only with financial resources, but also with cultural values, traditional living patterns, and with trade-



2. Public stands and cantilevered concrete shell roof, Baseball Stadium, Cartagena, Colombia. Photograph Ricardo Castro.

3. Alvaro Ortega, left, experimenting with cardboard tubes to develop an inexpensive roofing tile.

offs between the two. And lastly, it has come full circle to deal again with technological - practical - solutions. In this regard, the practical moorings of the program, which Ortega helped establish twenty-five years ago, are still intact. It will be five years this summer since the death of Ortega but we still believe what he used to say about building experiments and architecture: "you learn more from a building which falls down than from the one which stands up."

NOTES

1. Galaor Carbonell, *Alvaro Ortega*, Escala, Bogota, 1989, 19.
2. Carbonell, *Alvaro*, 19.
3. Carbonell, *Alvaro*, 19.

RESPONDING TO THE QUIET REVOLUTION IN HOUSING

PREPARING FOR A NEW MILLENNIUM

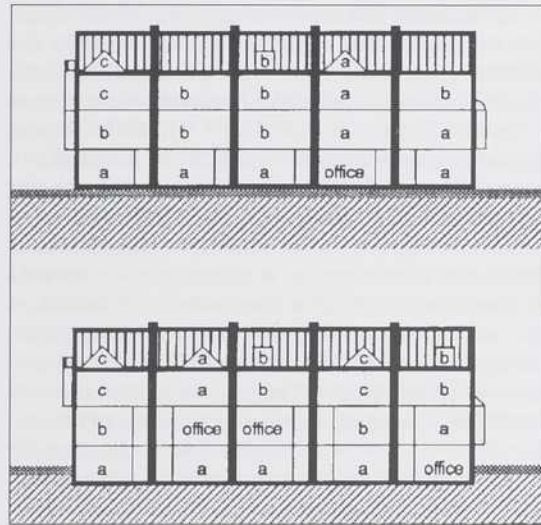
DR. AVI FRIEDMAN, DIRECTOR, AFFORDABLE HOMES PROGRAM

Le «Next Home» (logement futur), répond aux changements socio-démographiques, économiques et technologiques fondamentaux qui ont eu lieu ces dernières années, créant le besoin d'un nouveau type de logements flexibles, abordables et durables.

Numerous recent socio-demographic changes have contributed to a shift in housing accommodation away from the traditional North American single-detached home towards a variety of dwelling types which have in common two highly significant features: a reduced dwelling size and increased unit density. Smaller families, the proliferation of the non-traditional household and of the two-income family, and an increase in the population of elderly citizens have created the demand for a housing unit that is both smaller and more efficient than the large, detached house that many middle-class Canadians took for granted in their youths. Builders and designers of new housing prototypes can no longer ignore the contemporary household with its diversity of interior design needs. The Next Home – a research project of the McGill School of Architecture Affordable Homes Program to be presented as a demonstration unit on the McGill campus this summer – is a direct response to these new housing needs. The Next Home extends the research undertaken on the Grow Home project of 1990, an affordable, narrow-front, rowhouse prototype of which 5,000 units were subsequently built in the Montreal area. Key features of the Next Home include the opportunity to buy only the quantity of space that the user needs and can afford, the interior design layout based on a catalogue of components, flexibility to change and grow, choice of facade design, environmental responsibility and comfort, export potential, and a new urban perspective.

Today's adult Canadians conduct their lives in many ways unlike their parents and grandparents. An adaptable and responsive housing form is urgently required to accommodate fluctuating households. The new flexible unit must be able to change in accordance with its occupants. The centrality of the television, the need for communications outlets in most rooms, the growth of home offices, the accommodation of freezer and microwave in the kitchen to facilitate the increasingly rushed schedules of residents: all of these functions and activities must be adequately addressed in homes where more women than ever participate in the paid work force and where everyone – male and female – simply works harder and longer. In both the design and technical spheres of the Next Home, a lifestyle of increased technological complexity and reduced leisure time is acknowledged and provided for.

The restructuring of the North American economy away from resource-based activities and heavy manufacturing industries resulting in a greater population concentration around primarily service- and information-based urban centres will influence housing production and consumption in Canada. Also significant is the movement of manufacturing business to lower-wage-paying countries, exacerbating the financial plight of Canadian workers. These trends demonstrate the need for a new type of home: one that can be built affordably on a smaller than conven-



5 houses in a row at grade
and 5 houses in a row below grade

tional lot in denser communities and that can be modified to suit the particular lifestyle of its user. Unaffordability continues for many to be a major impediment to home ownership. Land and infrastructure costs have doubled in the past twenty years and have assumed a much higher proportion of the total price of a new house, presenting a major problem for most people considering their first purchase of a house, especially in times of economic uncertainty when lack of job security forces earners to regard their personal financial situations as precarious at best. The Next Home – which offers prospective buyers close to 700 square feet of living space for \$50,000 (including land!) in a city such as Montreal – is a long-awaited solution to this crisis in the housing market.

The last few years have witnessed the downturn of the North American real estate market with companies no longer willing or able to take bold risks in housing development. Moreover, the majority of house construction in Canada is still undertaken by small companies who build between 25 and 100 units per year and who are more cautious than ever in their investment and building activities. Both phenomena have initiated a downsizing of house design, resulting in the emergence of higher-density planned communities. In addition, the "move-up" market of homeowners is smaller now than ever before, creating new activity in the renovation sector which is rapidly becoming more vibrant than the new-house market. The increasing popularity of home renovation "supermarkets" illustrates this trend, and supports the idea of user involvement in the design/construction of the Next Home.

With decreased domestic economic activity in Canada, it is becoming apparent that in order to maintain the vital and active levels experienced by the homebuilding industry in the past few decades, the export of housing and housing technologies and products should be actively pursued. The Next Home is especially designed to be prefabricated and marketed in order to accommodate a foreign client who might wish to purchase a complete

house, a single one of its components, or a variety of building products.

A sustainable society is able to satisfy its economic and social needs without jeopardizing the prospects of future generations. The notion of sustainable development is essentially based on the conservation of natural resources and requires the reduced consumption of renewable resources following the earth's natural cycles, the maximum recycling of non-renewable resources and improved efficiency of use of non-renewable non-recyclable resources. The selection of building products and systems for the Next Home is based upon these essential principles.

One of the fundamental distinguishing features of the Next Home is the option the design extends to buyers of purchasing the type and "amount" of house that they need and can afford. This option is achieved by offering a single structure which can be built and sold as a single-family unit, a duplex, or a triplex. The four levels of the Next Home structure can not only be arranged to suit its residents, present requirements but re-arranged at a future date to accommodate household and family changes. The Next Home is also applicable to detached, semi-detached and row house configurations.

Users of the Next Home will be able to choose from a catalogue of interior components to suit their individual lifestyles and budgets, and preview the consequences of their selections with the added facility of computer imaging. These components (kitchen, bathroom, etc.) are selected at the pre-construction stage, allowing future residents to "consume" only those elements they require.

As part of the design of the Next Home facade, the user in a multi-unit structure can choose from a range of fenestration sizes and patterns, provided by the builder and designed by an architect. Further choice regarding window and door options completes the design of the opening and creates a personal facade for the unit. Such an element of choice not only provides personalization but creates visual diversification in a row of Next Home structures.

The need to house a diversity of users at both the scale of the dwelling and the community demands revision not only of the manner in which subdivisions are zoned but of the way houses are designed and marketed. The Next Home has been designed in terms of volumes to be subdivided: the units can be transformed from one type to another at the pre- and post-occupancy stages, while combining subdivided structures and grouping them in various ways increases density and reduces costs. Integrating a variety of households in a single structure is a strategy which answers the urgent need to accommodate a wide diversity of users and household types.

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First postgraduate architectural and planning program in Canada established in 1946 with Associate Professor Spence-Sales. Interdisciplinary program conferring Master's Degree in candidate's undergraduate discipline. Architecture program extended from five to six years in 1949, replacing prerequisite year in arts and sciences with additional year in engineering. Student initiative brings Buckminster Fuller to help undergraduates build geodesic dome in 1956. History and theory courses reorganized in 1956 with appointment of internationally recognized architectural historian and critic Peter Collins. Building construction lectures introduced by Jonas Lehrman (M. Arch '60, Professor '61-) and Norbert Schoenauer (M. Arch '60, Professor '61-) to design studios. Lehrman and Schoenauer also establish graduate program in housing in 1962—first in North America. Increased specialization of engineering leads to decreased contact with architecture: in 1964 Architecture School assumes responsibility for Acoustics, Mechanical and Electrical Services. However close link with structural engineering preserved (to this day). Joseph Baker initiates the Community Design Workshop in 1968. The introduction of the CEGEP system to Quebec education in the late sixties forces cutting of architecture program from six to four years, reducing students' exposure to architectural issues. Minimum Cost Housing Program established by Alvaro Ortega ('44/Professor 70-74, '88-91) in 1971. Accredited Department of Urban Planning established by David Farley ('59/Professor '71-93) in 1972.



Tools/facilities: Veteran influx causing significant increase in enrolment occasions move to Victorian neo-medieval Mansion adjacent Engineering Building on University Street in 1947. Demolished for expansion of Engineering building—Architecture School occupies northeastern wing of new construction in 1959. Stuart Wilson ('44/Professor '48-91) supervises Architectural Workshop, undertaking experimental work with materials, construction methods, structure,

ÉTHIQUE ET IMAGINATION EN ARCHITECTURE

ALBERTO PÉREZ-GÓMEZ, SAIDYE ROSNER BRONFMAN PROFESSOR OF THE HISTORY OF ARCHITECTURE

In the late 20th century, at a time when our technological civilization faces the dilemmas of a world with finite resources, ethical questions concerning architectural practice must be re-examined. What is the role of the architect's personal imagination in the context of a civilization respectful of cultural differences and democratic rights? How do aesthetic values relate to the urgent questions concerning the abuse of resources and wasteful means of production? Is there a place for the architectural project as a proposal for an alternative future, distinct from those proposed by technological utopias or dystopias, resulting in a more poetic and richer human life for all?

Le bien commun a toujours été une préoccupation fondamentale en architecture. On le constate dans les écrits de Vitruve et d'autres qui, au cours des siècles, ont cherché à élucider le sens de la praxis architecturale. Si la dimension éthique ne se perçoit pas aisément, c'est qu'elle est inhérente à cette praxis plutôt qu'elle n'est un ajout extérieur à une quelconque activité purement technique ou formelle. Par leur volonté inlassable de dévoiler un ordre symbolique, les architectes s'efforcent depuis toujours de procurer à l'existence individuelle un environnement construit qui reflète la finalité des institutions sociales et de la vie en général. La pensée et l'action humaines, depuis les mythes et la religion jusqu'à la science et aux arts, représentent des réponses apportées, à différentes époques et en des lieux divers, à des questions fondamentales qui sont essentiellement les mêmes. Loin de répondre uniquement à un souci esthétique ou technique, l'architecture s'efforce de situer l'action humaine dans un cadre approprié, jouant ce rôle conciliateur malgré la propension de l'homme à contrôler et dominer ses semblables et son environnement.

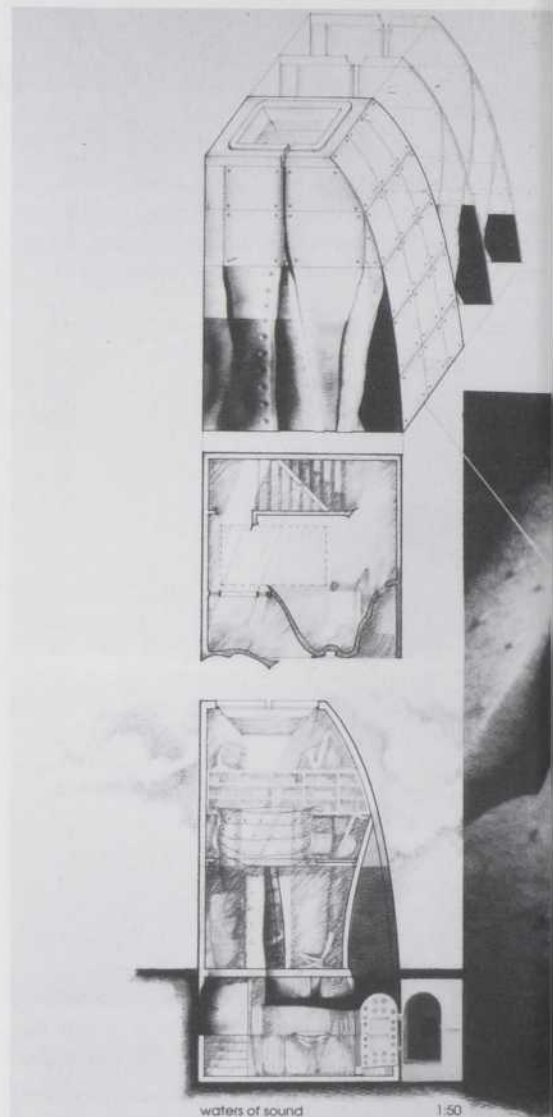
Aujourd'hui, nous comprenons peut-être enfin que la réduction des beaux-arts à un formalisme esthétique dénué de considérations morales n'est pas un paradigme absolu mais plutôt un événement historique lié à la glorification de la raison scientifique au dix-huitième siècle. Les rationalistes, persuadés que les sciences exactes pouvaient révéler la vérité absolue - une croyance dont l'origine est du reste théologique -, ont implicitement relégué l'art (et l'architecture «non scientifique») dans une zone marginale et illégitime. La définition de la pratique architecturale en vint alors à reposer sur deux postulats: d'abord, l'architecture se distingue des autres modes de construction par l'intérêt qu'elle montre pour les manipulations formelles; et ensuite, elle doit apporter une solution adéquate aux conditions internes engendrées par un «programme» étranger à la discipline de l'architecte. À partir de la même logique scientifique, on supposait que l'éthique était autonome, elle aussi étrangère aux préoccupations formelles résiduelles des «constructeurs ornementaux»; on estimait qu'elle se trouvait subsumée dans les valeurs technologiques paradigmatiques de l'efficacité et de l'économie. Un constructeur peut-il avoir d'autre souci que de concevoir le bâtiment le plus fonctionnel qui soit et de dépenser le moins possible pour réaliser cet objectif?

La polarisation de l'éthique et de l'esthétique a été exacerbée par le nihilisme confus qui imprègne notre culture post-nietzschéenne, le babel des disciplines et des intérêts spécialisés, l'omnipotence de la technologie et de la simulation. Encore aujourd'hui, on considère souvent l'éthique comme extérieure à l'architecture (et aux autres disciplines du design), comme un système essentiellement subjectif et donc sans conséquences dans notre univers pluraliste. Et pourtant, ne pourrait-on pas soutenir qu'en dernière analyse, c'est à sa capacité d'exprimer des valeurs éthiques qu'est liée la pertinence culturelle de l'architecture?

Si l'architecte doit jouer un rôle au vingt-et-unième siècle, dans un monde complexe et plus conscient des contraintes environnementales et des différences culturelles, un monde où la technique continuera néanmoins de s'étendre à l'échelle de la planète, il doit méditer sur des stratégies propres à révéler la capacité de sa discipline à concrétiser une intentionnalité éthique. Il faut célébrer comme des atouts l'ambiguïté et l'opacité inhérentes à l'architecture conçue comme un univers poétique de discours qui s'adresse directement à la compréhension perceptive et imaginative (plutôt qu'intellectuelle) de l'humanité, et non les déplorer comme si elles étaient des limites. Peut-on dépasser le relativisme purement formel (stylistique) et le professionnalisme pragmatique, tout en maintenant les conditions indispensables qui font de l'architecture moderne/post-moderne une discipline à la fois fonctionnelle et conventionnelle, reposant sur la valeur d'usage du bâtiment mais aussi capable de reconnaître le rôle central que joue la syntaxe dans la production éventuelle d'une métaphore poétique? Peut-on contempler l'architecture comme si elle était l'expression non discursive d'un savoir né d'un souci de l'autre?

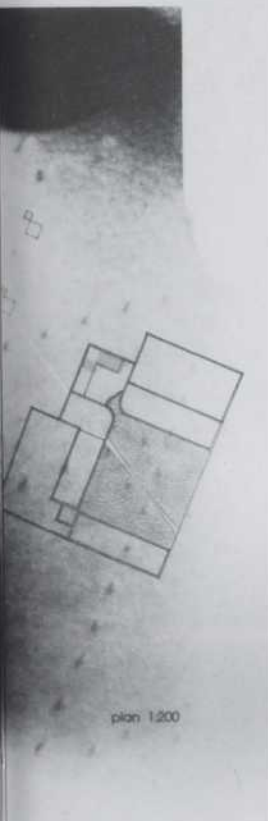
Des critiques culturels bien intentionnés, cherchant à «déconstruire» les structures oppressives du pouvoir au sein de notre tradition et d'accroître celui de l'individu libre, on en même temps proclamé l'autoréférentialité de l'art - le labyrinthe post-moderne des miroirs et des valeurs relatives -, ce qui supposait implicitement que l'imagination individuelle, et avec elle la possibilité même d'une action éthique, pourraient être des illusions. Mais le fait d'affirmer le caractère fallacieux d'un fondement absolu et ontologique ne conduit pas forcément à l'autoréférentialité absolue du langage et de l'art. Poursuivant des buts différents, certains critiques (Paul Ricoeur, Jean-François Lyotard, Richard Kearney et Julia Kristeva, notamment) privilégient, chacun et chacune à sa manière, une voie qui se distingue à la fois de l'imagination mimétique traditionnelle - de la conception aristotélicienne qui présuppose l'existence d'un cosmos intersubjectif qui est accessible à tous et n'a besoin que d'être «imité» - et de l'imagination égocentrique des Romantiques, qui présuppose la possibilité d'une création ex nihilo. Tout en reconnaissant le caractère inévitable de «l'intertextualité» et des conventions - et, donc, en prenant au sérieux la découverte de l'autonomie ultime du langage faite par Rimbaud -, ces critiques admettent au départ la possibilité d'une manifestation de l'imagination qui parle encore de quelque chose qui lui est autre, d'un avenir éventuellement différent fondé sur des valeurs glanées parmi les traces de l'histoire. L'intégration éventuelle des préoccupations éthiques et esthétiques a des conséquences profondes pour la pratique architecturale, car elle pose la question de la production de la forme au moment même de la conception de cette dernière.

Il faut, par ailleurs, avoir une connaissance approfondie du technologisme qui domine notre univers culturel pour considérer la genèse de l'architecture sous toutes ses facettes et comprendre pleinement la dimension publique



de sa signification, puisque c'est à l'intérieur de cet univers que l'architecte doit travailler. La technologie est bien plus qu'une simple question de machines; elle est bien plus qu'une caractéristique de notre culture parmi d'autres. Il est clair, désormais, qu'il y a un lien étroit entre la nature de la technologie et un certain nombre de traits culturels qui définissent à la fois la modernité et la post-modernité. Depuis la Révolution industrielle, notamment, la technologie a rendu possible la création d'un environnement entièrement construit. Mais un monde fait de telles constructions agirait bien plus comme un mur entre l'homme et la nature que comme un pont entre notre conscience et une réalité extérieure que nous n'avons pas créée. Un abîme sépare en effet la technologie moderne/post-moderne des techniques traditionnelles des cultures pré-industrielles. La technologie substitue une «image» à l'univers perçu par notre expérience première. Si mutable et historiquement déterminé que soit cet univers de l'expérience première, la phénoménologie révèle que l'universel et le spécifique s'y présentent de façon simultanée dans le mystère de la perception, dans l'espace situé

Détail du projet de concours «A Place to Heal the Earth and the Body» / Osaka Quarry Association, par Alberto Pérez-Gomez et Louise Pelletier.



compréhension nouvelle aurait un effet immédiat sur la représentation architecturale, sur la production de l'architecture, sur le rôle des modèles scientifiques et sur le recours au langage pour préciser les intentions des concepteurs.

Ces aspects de l'idéation architecturale préoccupent au premier chef aussi bien les théoriciens que les praticiens de l'architecture. En cette fin du vingtième siècle, la pertinence culturelle et politique de la profession dépend des réponses qu'on apportera à ces questions. Les rapports entre l'architecture et le monde technologique sont au cœur des problèmes théoriques que pose l'élaboration d'une pratique fondée sur l'éthique. Les incidences de ces rapports importent bien davantage que les distinctions stylistiques superficielles qui accaparent une large part du débat contemporain sur l'architecture.

Il ne suffit pas de rejeter ou critiquer la technologie du seul point de vue de l'art, de la métaphysique ou de l'humanisme traditionnels. Il serait difficile de nier que l'impulsion qui anime ses réalisations et ses échecs est effectivement la soif de transcendance de l'homme, surtout après le point tournant épistémologique qu'on représenté les travaux de Copernic et de Galilée. À mesure qu'il devenait évident que ni Dieu ni l'homme n'était au centre de l'univers, la technologie est devenue une réponse moralement justifiable à l'éternelle difficulté d'adaptation de l'homme au cosmos. Cette quête est liée au désir plus que millénaire de l'homme européen de vivre dans un univers ontologique continu, d'habiter la terre dans un mode poétique. Cette quête a-t-elle été abandonnée au profit d'une «fausse» solution qui ne paraîtrait vraisemblable que si Dieu était absent? Obsédée par les réalisations de l'instrumentalité et par l'affirmation de sa propre volonté de pouvoir, la technologie a mené l'humanité post-moderne dans un piège gnostique, où le monde réel pré-existant est oublié. Aujourd'hui, nous sommes souvent victimes de forces que nous avons cru pouvoir maîtriser. La crise de l'environnement et les dilemmes que suscite la manipulation biogénétique en sont deux exemples probants.

Comme l'a montré Heidegger dans son essai sur la technologie, les dangers actuels qu'elle présente sont à la fois plus subtils et plus graves que la capacité d'autodestruction de l'humanité et la menace d'une catastrophe écologique. Le rejet de la mort comme limite positive et essentielle de la vie pourrait, en effet, finir par compromettre l'ouverture de l'existence humaine à la signification et, par là, la perpétuation de la civilisation par l'entremise des institutions culturelles et d'autres symboles. Le nihilisme du désespoir pourrait se révéler une force destructrice et impossible à contrôler, qui supplanterait le nihilisme affirmatif dont Nietzsche a montré la nécessité. Bien qu'il conteste la vérité absolue de la métaphysique occidentale, qu'il conçoit comme échappant à l'expérience (la conception platonicienne de la vérité comme «correspondance»), ce nihilisme affirmatif permet néanmoins à l'humanité de rester ouverte au puissant silence de l'art et de l'architecture, au sombre rayonnement de la lumière, tout en restant sensibles aux échos des pas silencieux des dieux qui s'ap-

prochent en dansant... Au bout du compte, le problème consiste à comprendre le pouvoir de l'encadrement technologique, à comprendre que, même si nous sommes encadrés, la technologie en elle-même peut être «faible» - que, même si Dieu et l'homme ne peuvent être récupérés, la Terre (et le ciel) forment un lieu central où nous pouvons vivre notre pleine expérience matérielle, qui nous permet désormais de contester l'hégémonie des constructions abstraites et théoriques... Dernier paradoxe, cette prise de conscience est confortée par le fait que nous savons maintenant que la terre est le seul oasis de vie dans le désert du cosmos...

En architecture, les dangers de la technologie sont directement liés à la représentation réductrice, à l'homogénéisation culturelle, à la mort de la ville en tant que lieu d'interaction publique. L'architecte doit reconnaître ces dangers et en assumer sa part de responsabilité. Un premier pas vers un débat éclairé serait de comprendre que la prémisse de la polémique qui oppose le post-modernisme au mouvement moderne - la fuite nostalgique en vue d'éviter le discours technologique - est par trop simpliste. Pour éviter ce recul, peut-être faut-il reconnaître les origines mystérieuses et les transformations de la technologie elle-même au cours de l'histoire. Il nous faudra peut-être remettre en question notre relation instrumentale, souvent arrogante, avec le monde extérieur et explorer d'autres voies, y compris l'élaboration d'une stratégie visant à «déconstruire» le langage de la science et de la technologie au moyen d'une vision poétique. Il pourrait éventuellement en naître une nouvelle relation entre la pratique et les objets culturels dont est constituée notre tradition architecturale.

La philosophie de la post-modernité, telle qu'exprimée dans les écrits de Gianni Vattimo et ses interprétations de Nietzsche et Heidegger, semble déterminée à faire disparaître l'écart qui s'est créé entre les cultures technologique et esthétique et, avec lui, l'écart entre le rationalisme et l'irrationalisme qui nourrit la modernité au moins depuis les débuts du dix-neuvième siècle. L'idée même du progrès historique, étroitement lié à l'assimilation de la technologie par l'architecture et à la valeur indiscutable de ce qui est nouveau, est devenue intenable. Dans ce contexte, une analyse éclairée doit remettre en cause les idées reçues sur l'histoire de l'architecture, sur la théorie, la représentation et l'idéation architecturales, enfin sur l'éthique professionnelle et la production de bâtiments dans la ville post-industrielle.

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full-size mock-ups and models. Bruce Anderson expands and updates Webber's photo lab, establishing sophisticated Visual Communications Lab which becomes model for other schools.

Other Faculty: Considerable reliance on part-time teachers including Arthur Lismer, founding member of the Group of Seven (teaches 1941-61), Fred Lasere (leaves to head UBC's New School of Architecture, inviting McGill graduates Catherine Chard ('43)—first woman graduate, Peter Oberlander ('45) and Arthur Erikson ('50) to teach there, Ray Affleck and Guy Desbarats ('48), founding members of ARCOP. (Desbarats teaches design '53-58, then organizes U of M's new school of architecture, hiring numerous McGill graduates). Appointment of Douglas Shadbolt (Assistant Professor '58-61) sets new standard of full-time status for the teaching of design. Shadbolt leaves to establish School of Architecture first at Nova Scotia Technical College, then Carleton University ten years later. In 1966, to strengthen ties with the profession, Bland begins tradition of appointing distinguished practicing architects as visiting professors.

Enrolment: student enrolment expands in the 60's with move to new building after remaining a constant 135 through the fifties.

STUDENT REVOLT leads to Norbert Schoenauer's appointment as Acting Director 1972-75.

University limits directorship to maximum two terms. Schoenauer steps down in 1975 to devote himself to his primary interest—housing.

Program: Joint staff-student advisory committee established; deliberates on expansion of optional courses and future development of architectural education. History of architecture courses remain mandatory against wishes of students.

1975-PRESENT

Apart from one term served by Bruce Anderson—1985-90, Derek Drummond ('62) has served as Director since 1976. First appointed to

RE-THINKING THE ELEMENTS

A STUDIO TEACHING APPROACH IN THE BEGINNING YEARS ¹

RICARDO L. CASTRO, ASSOCIATE PROFESSOR OF ARCHITECTURE

Ces articles par Ricardo Castro et Jonathan Roushan décrivent quelques unes des approches typiques que l'on peut trouver dans l'enseignement du design architectural à l'École d'architecture de l'Université McGill au niveau de deuxième année. L'emphase éducationnelle à ce niveau présente autant à l'atelier qu'au laboratoire de construction, consiste à permettre aux étudiants une expérience directe avec les principes, les matériaux et les outils du «savoir faire constructif», encadré simultanément dans la structure théorique de l'atelier. Dans le cas particulier de l'atelier de Ricardo Castro, les aspects théoriques sont accompagnés par un discours mythologique.

There are valued times in almost everyone's experience when the world is perceived afresh: perhaps after a rain as the sun glistens on the street and windows catch a departing cloud, or, alone, when one sees again the rounded of an apple. At these times our perceptions are not at all sentimental. They are, rather, matter of fact, neutral and undesiring—yet suffused with an unreasoned joy at the simple correspondence of appearance and reality, at the evident rightness of things as they are. It is as though the sound and feel of a new car door closing with a kerchunk! were magnified and extended to dwell in the look, sound, smell, and feel of all things. Michael Benedikt ²

Since the late 1980s, part of the second year design studio at the McGill School of Architecture has focused on the development and implementation of design strategies informed by the formulation of critical ideas regarding our immediate environmental conditions and their translation into architecture.

These critical ideas have been framed by a metaphorical return to the elements. The main focus of this return has been a recognition of the importance of the careful knowledge of natural phenomena and its pivotal role in the articulation of significant architectural designs.

Two fundamental questions have framed this exploration into "elemental knowledge". The first asks whether there is still a natural world, separate from the world which we have built, that we can investigate and explore, or is it rather the constructed, simulated, and non-real world that we are destined for.

The second question challenges the otherwise eye-centered perception of the natural world which focuses all experiences outside of our bodies onto a linear connection between the retina and our minds. Is it feasible to posit a more encompassing and inclusive spatial understanding which attempts to re-place the body at the centre of all perceptual experiences and which revalorizes the workings of all of our senses (hearing, touching, tasting, smelling, seeing) in the experiencing of architecture?

The reflective process has included both natural (Earth, Air, Water, and Fire) and architectural elements (spatially significant elements such as Columns, Walls, Floors, Ceilings, Stairs and Ramps).

ELEMENT AS GENERATIVE PRINCIPLE

Traditionally the elements have been understood as particular reductions of natural compositions and systems. ³ Yet the elements can be demonstrative of general as well as particular phenomena. This reversal challenges the idea that the elements are simply specific, isolated and quantifiable realities, reduced to their most inert matter. We have tried to understand them as already holding and imparting a view towards the more inclusive, where they speak of something larger while speaking of themselves. A speck of earth is not inseparable from the whole context of soil and its composition, the quality of our drinking water supply, etc. The speck carries with it the code and essence of all geological studies and is, simultaneously, both particle (fragment) and generative principle (earth).

An architectural composition and construction can be similarly viewed through this reversal: regardless of where a work is erected it not only carries its particular design characteristics but also the reflection of other architectural works and constructions. In this sense there cannot be any design work independent of other sites, works, narratives, distanced and removed from the immediate context of the world.

ELEMENTS AS A STATE OF PERPETUAL FLUX

Our understanding of elements as stable compositions of the most reduced and inert materiality has been challenged in order to suggest a view of the elements as transitional agents. This has involved an understanding that earth is never truly just earth, but rather a constantly changing composition of air, earth, fire and water. No one element ever truly exists solely by itself in a state of rest. The composition of each element in any given object is never fixed.

The question remains whether natural elements are an appropriate metaphor for architectural elements, where the latter are often understood as fixed and bounded states (between wall and floor, floor and column, for example). How can such an idea of continuous flux and transformation engage architectural elements which otherwise tend to speak about rigidity, objectification, and immutability?

A return to the elements can be seen as an important critical activity at a time in which the established practice of architecture is increasingly questioned. An overall sensitivity to the implications of building in a strained environment can be fostered through an exploration of the natural elements' relation to the architectural elements that invariably must come to deflect, envelope and caress them. Walls, ceilings, floors, stairs can be thought of as always feeling the touch, the pressure, the presence, as it were, of either air, light, heat, things or people.

TRANSLATION INTO ARCHITECTURE.

With the critical idea of "elemental knowledge" as our marker, we have attempted to understand how a study of the elements (both natural and architectural) can be translated into design issues which explore the making of architecture. A particularly well-suited vehicle for exploration has been the re-designing and re-making of ancient measuring instruments such as sundials, choreobates and gromas. ⁴ Contemporary instruments, such as time-capsules and pinhole cameras, have also been used.

This making has combined methods of study, research and creation that are both constructive and contemplative, poetic and scholarly, mythical and real. As such the students have engaged in a serendipitous discovery through a series of readings as well as design and construction projects which, emphasizing the making, have led to an awareness of the immanent corporeality of objects, of things... and ultimately of architecture.

NOTES

1. Edited and revised version of the introductory program document for my second-year Design and Construction Studios at the School of Architecture, McGill University. I would like to acknowledge here the significant contribution made to the teaching and the theoretical aspects of the course by my teaching assistant Franca Trubiano during 1994-95, who was extensively involved in the elaboration of the original document. Also my special thanks to Jonathan Rousham, workshop technician, for his constructive indefatigable criticism and continuous counsel to the students.
2. M. Benedikt. *For an Architecture of Reality*. New York, 1987, p.2.
3. The Traditional definition of Element, according to the Webster's Ninth New Collegiate Dictionary, is:
 - a. one of the four substances air, water, fire and earth, formerly believed to compose the physical universe.
 - b. a constituent part, the simplest principles of a subject of study, a distinct part of a composite device.
 - c. a part of a geometric magnitude, an infinitesimal volume. There are many more definitions which, like the one provided by the Webster's, can be challenged.
4. The Groma was a Roman device used to insure that roads and agricultural boundaries would meet at ninety degrees. The Choreobate was a Roman levelling instrument used mainly in the construction of aqueducts.



AN ARCHITECTURAL EDUCATION IN THE WORKSHOP

JONATHAN ROUSHAM, SENIOR TECHNICIAN IN CHARGE OF THE ARCHITECTURE MODELING LABORATORY

1. *Groma. Anne Bordeleau, 1993. Wood, steel, aluminum.*
2. *Pinhole camera. Serge Appel, 1993. Aluminum.*
3. *Sundial. Patrick Evans, 1994. Snow fence, aluminum, glass.*
4. *The Icarus Project: Interpretative Viewing Device. Dimitri Koubatis, 1995. Wood, steel, condom, water.*
5. *The Icarus Project: Interpretative Flight Simulator Structure. Zeina Talje, 1995. Wood, ropes, parachute harness, pulleys.*

Somewhere in between the realm of architectural theory and professional practice lies the world of materials and technique. From the Arts and Crafts movement and the Bauhaus to the latest investigations in phenomenology, there has been a conscious effort to formally address issues of material and craft.

All approaches to architecture sooner or later confront the issue of the material palette, and it seems evident that the better equipped the architect is to consider the entire spectrum of a given material's properties, the more successful will be the choices made: in short, technical skill is ideologically neutral (though not value neutral).

In a school of architecture there is a tacit responsibility to teach this to students early on, if they will be expected at some later point to make informed proposals. Not discounting romantic personifications of what a *material wants to be*, we still make rigorous demands on the *designer* to understand immediate and long-term physical and aesthetic qualities of materials and at least the fundamental aspects of applied construction technologies. This

affirms the architect's responsibility to fully consider the inherent links between tectonics and the myriad other formal considerations that make "architecture."

It is towards this end that for the last three years students in second year studio have been building full-scale representations of designs. Assignment topics have ranged from an investigation of sundials, to the flight of Icarus, the Berlin Wall, a house for an object, and devices for travelling through time. After studying the architectural possibilities and implications of these topics, students arrive at initial proposals which they bring to the workshops. There they begin the sometimes difficult process of reconciling their desires with the reality of what a material will actually do. Often this will mean substantial changes, many crude cardboard and duct tape models, and frustrating attempts to detail what initially appeared to be simple forms.

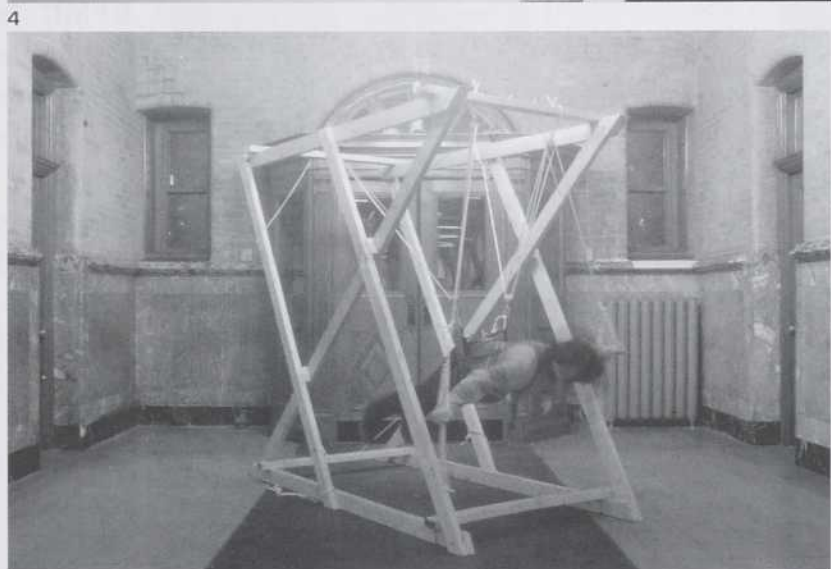
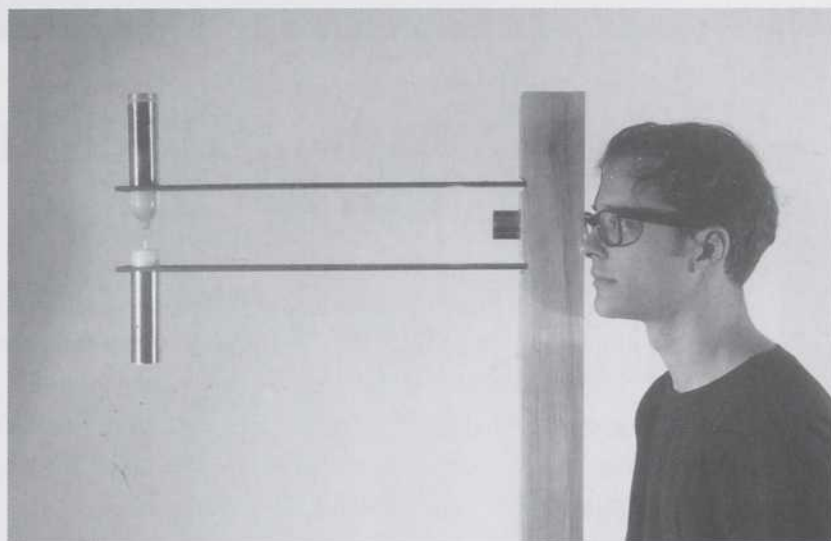
As wrenching as this process can be (having to tell someone that their idea isn't bad... it just won't work), it serves to prepare them for the brutality of the next step—actually building their designs. It is here that academic arguments are reduced to twisted bits of metal, that failures and near failures occasion a return to the drawing board, and final reconciliations are made between the dream and the object.

It is also here that many students have their first smell of fresh sawdust and begin to know the simple pleasure of creating something from their imagination. They are encouraged to be thoughtful and patient, to see that even the most basic levels of quality require a commensurate degree of skill and diligence.

The range of materials encountered in executing these projects is broad. Students have the opportunity to see the subtle differences between copper, brass, and bronze, experiencing first-hand the hard durability of stainless steel and contrasting it against aluminum's malleability and more accessible working qualities. They are introduced to the distinctions between what can be done with solid wood and with plywood, the myriad species of wood and their attributes (why do we use birch here and ash there?) and the wide variety of reconstituted fiber boards. Other materials used are glass, acrylic, plaster, and assorted cement products.

Along with these material choices the students must consider methods of fabrication and their impact on the finished work; whether to weld, solder, rivet, or bolt two pieces of metal together; how to treat the forms for a cast piece, or what joint will best serve a wood connection. Because they must then execute the work themselves, they have the opportunity to learn valuable lessons about the relationship between production techniques and cost and quality control.

Perhaps the aspirations for these projects are too high, and certainly they can only be seen as an introduction to what is a large and sophisticated body of knowledge. The greatest hope is that students will begin to appreciate just how much can be gained through a good knowledge of material and craft, and so begin a longer term commitment to further investigation.



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teach design in '65, then made Assistant Director under Bland, Associate Director in 1972, then Acting Director in 1975. Drummond reappointed in 1990 and his term renewed in 1995.

Pedagogy: continuation of the pluralistic approach instituted by Bland.

Program: Exchange programs established with schools in Columbia, Italy, France, Belgium, Austria, Israel, and Australia, sending 10-15 second/third year students abroad/year with a parallel influx of foreign students. Postgraduate programs restructured in the mid-eighties to focus on architectural history/theory, and housing. With the endowment of the Saidye Rosner Bronfman Chair in Architectural History, Alberto Pérez-Gómez appointed in 1987 to head the history/theory program. Witold Rybczynski ('66, M. Arch '72), runs the Centre for Minimum Cost Housing with Vikram Bhatt (M. Arch '75), then creates the Affordable Housing Program in 1988 with Avi Friedman. Approximately 50% of students now complete four year program in four-and-a-half to five years. Shaver Scholarships encourage student travel and expansion of summer course offerings 1996: portfolio introduced as universal entry requirement (previously portfolio only required of those not coming from CEGEP)

Enrolment: jumps from 10-80 students in postgraduate programs. Includes 6 students presently enrolled in ad hoc Ph.D program. Undergraduate enrolment: 160.



Tools/facilities: Anderson oversees renovation and move to Macdonald Harrington Building in 1987; gives Architecture School identity distinct from Engineering. Extensive workshop and visual communications facilities. Installation of PC-based lab in the eighties, McGill University Apple Design and Modeling Centre, 1991. School's main WEB site, <http://prometheus.architecture.mcgill.ca>. The Blackader-Lauterman Library of architecture and Art, a pioneer in WEB use: <http://blackader.library.mcgill.ca>



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THE SCHOOL AND THE COMMUNITY

DEREK DRUMMOND, MACDONALD PROFESSOR OF ARCHITECTURE, DIRECTOR OF THE SCHOOL OF ARCHITECTURE, MCGILL UNIVERSITY

Un des grands plaisirs dont un architecte peut faire l'expérience est de créer des lieux ou de concevoir des espaces que d'autres peuvent apprécier et aimer. Durant de nombreuses années à l'École d'Architecture de McGill, les étudiants ont eu l'occasion de s'engager dans la communauté en participant à des projets qui dépassaient le stade de la conception pour être construits. Afin de marquer le centième anniversaire de l'École, deux projets de la sorte furent entrepris: La réplique du Panthéon construit de neige et de glace ainsi que les jardins centenaires des deux côtés de l'édifice Macdonald-Harrington. McGill continuera d'offrir de telles opportunités à ses élèves dans la croyance qu'elles sont vitales à l'École, ses élèves, la profession et toute la communauté.



Ice Pantheon

One of the great pleasures that an architect can experience is to make places or create spaces that others appreciate and enjoy. It is in the anticipation of this experience that generations of students have based their decisions to study architecture. But to offer students this type of valuable learning experience in the academic context is difficult for schools of architecture to organize and accomplish.

The traditional architectural exercise or studio design problem usually results in the presentation of an idea supported by drawings and models. Although the importance of this as a problem-solving method cannot be overstated, it excludes from the process the act of making—of actually building the project. Also excluded is the evaluation of the response of the eventual users. In relying, for obvious reasons, on this relatively restrictive model of architectural problem-solving, schools of architecture have isolated themselves from the communities in which they exist. Contact with critics other than architects and fellow students is rare, encouraging the development of a language undecipherable by others. This further disconnects the architect from society and outside our schools, particularly

within the academy, what we are doing is a mystery.

During my forty-year association with the McGill school, there have been numerous attempts to initiate problems that progressed beyond the design stage and resulted in students being involved in construction and with the community at large. During my student days, Buckminster Fuller came to the School and, with a class of senior students, designed and built a geodesic dome. The students involved still refer to that experience as though it happened yesterday. In the sixties, Joe Baker initiated the Community Design Workshop—a store-front architectural service—that offered students practical experience and the community access to affordable advice and, in some cases, labour.

Throughout the sixties and seventies, Stuart Wilson designed, and students built, a number of prefabricated buildings both houses, that were eventually located on rural sites, and an 'A-frame' structure that is now the gate-house of the Morgan Arboretum on the West Island. In the seventies and early eighties, as part of the first year design course, students designed and built children's play apparatuses for a number of nursery schools, parks and the Montreal Children's Hospital. During the same period, Pieter Sijpkes and students in his design course designed and built ice sculptures on the McGill campus. For over ten to fifteen years the community has enjoyed the spectacle of his experiments with many different methods of building with ice, in most cases, with stunningly beautiful results.

A number of projects were recently undertaken to mark the hundredth anniversary of the McGill School of Architecture. Parallel to those of almost exclusive interest to architects (publication of the first in a series of monographs, a Centennial Lecture Series featuring distinguished graduates, and an exhibition of graduates' work) the School completed two projects with more universal appeal; an ice palace and a Centennial garden, both involving students in their construction.

During the winter term, the School again called on the expertise of Pieter Sijpkes. Intrigued with the challenge of long span capabilities of snow and ice construction, he decided to rely on a two thousand year-old design and to build a one-fifth scale replica of the Pantheon requiring the construction of a dome thirty-two feet in diameter. With his students and a crew of McGill workers and volunteers, Pieter built four-foot wide walls using slip-forms. The dome, complete with oculus, was cast in formwork. As the skeptics retreated, thousands came to admire and experience this extraordinary structure. The interior easily held two hundred or more people, and proved a unique location for parties. Even as it slowly, very slowly, melted, it continued to attract attention and to elicit comments and feedback.

The next project, completed during the month of May, was planned to be permanent rather than ephemeral. Over time, it will certainly attract as much attention and come to be admired as was the frozen Pantheon. Under the direction of John Schreiber, students constructed the Centennial Gardens in the external spaces contiguous to McGill's Macdonald-Harrington Building—home of the

School of Architecture. The garden has three distinct parts: to the north of the building, the land between the school and the engineering building has been reformed into a delightful space defined by a ring of trees - one for each of the full-time members of the teaching staff. To the south, a series of smaller spaces, on many different levels, have been created using stones from demolished McGill buildings as retaining walls. Across from the main entrance, six new commemorative trees have been planted, aligned with the road and forming a backdrop to a long, curved bench made from recycled stone.

Both the garden and Pantheon have offered the students the opportunity to build links to the campus community, and to demonstrate the architects' ability to create meaningful and beautiful spaces, not merely for their own satisfaction, but for the enjoyment and delight of others. At a time when schools of architecture are being accused by the profession and the public of being insular, or worse, irrelevant, the opportunity to demonstrate place-making skills should be seized.

Although the occasion of celebrating our hundredth year of existence appropriately offers us the opportunity to recognize our illustrious graduates and acknowledge our collective achievements, it should also provide the chance to contemplate our future, and by extension, the future of our students of today and tomorrow.

Paradoxically, the public, and in particular developers and institutional clients, delight in good architecture but have little respect for architects; they admire fine old buildings and great historic places while at the same time harbouring negative feelings about current practitioners. This no doubt stems in part from the inability of our schools and of the profession to properly integrate into the community. We have become an insular profession, highly critical of what we see being built today and frustrated by the lack of opportunity to build according to our personal values and aspirations. There is a general lack of respect for the non-architect's ability to participate in the decision-making process of design. But we have been unable to stimulate and maintain a community culture that respects the value of a well-designed and well-maintained physical environment, as has been done in Chicago and in many European cities. Such a value system is not created by edict; it must be nurtured through dialogue and debate.

It is essential that we provide students with the chance to begin to engage in this dialogue with the community through design-build projects. It is likely that too many of today's students will resist, or even struggle to avoid, these opportunities, labelling them non-theoretical or too restrictive to their individual creative impulses. But the McGill School of Architecture will continue, as it has for at least the past forty years, to offer such opportunities in the belief that the dialogues they stimulate with the community are vital to the School, its students, the profession and, in the end, the community itself.



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